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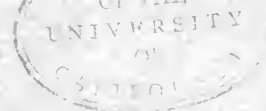
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UNIVERSAL EXPOSITION 1915

CELEBRATING
THE OPENING OF THE
PANAMA CANAL

OFFICIAL CLASSIFICATION
OF
EXHIBIT DEPARTMENTS

PANAMA-PACIFIC INTERNATIONAL EXPOSITION

SAN FRANCISCO, U. S. A.

FEBRUARY 20 TO DECEMBER 4

1915

AUGUST, 1913

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III A=

**OFFICIAL CLASSIFICATION OF
EXHIBIT DEPARTMENTS**

OF THE

PANAMA-PACIFIC INTERNATIONAL EXPOSITION

TO BE HELD AT SAN FRANCISCO IN THE YEAR 1915

IN CELEBRATION OF THE COMPLETION OF THE
PANAMA CANAL

OPENING, FEBRUARY 20, 1915

CLOSING, DECEMBER 4, 1915

AS FINALLY AMENDED AND APPROVED BY THE PRESIDENT

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FINE ARTS

DEPARTMENT A

(Open to works of United States and Foreign Artists,
whether previously exhibited or not.)

GROUP 1

PAINTINGS AND DRAWINGS

- Class 1. Paintings on canvas, wood or metal, by all direct methods in oil, wax, tempera or other media; enamels; paintings on porcelain, faience and on various preparations, of purely pictorial intent; mural paintings in any media.
- Class 2. Paintings and drawings in water color, pastel, chalk, charcoal, pencil and other media, on any material. Miniatures on ivory or ivory substitutes.

GROUP 2

- Class 3. Etchings, engravings and block prints in one or more colors. Auto-lithographs with pencil, crayon or brush.

GROUP 3

SCULPTURE

- Class 4. Works in the round, high and low relief; busts, single figures and groups in marble, bronze or other metal; in terra cotta, plaster, wood, ivory, or other materials.
- Class 5. Models in plaster and terra cotta.
- Class 6. Medals, plaques, engravings on gems, cameos and intaglios.
- Class 7. Carvings in stone, wood, ivory or other materials.

GROUP 4

LOAN COLLECTION

Selections of especially interesting art works of various kinds, from institutions and private collections.

The following will not be admitted to the Fine Arts Department.

- 1.—Copies; works resulting from industrial-mechanical processes.
- 2.—Pictures, drawings or engravings not framed.
- 3.—Works of sculpture in unbaked clay, or any form of modeling wax.
- 4.—Architectural ornaments except such as may be included in Group 3.

EDUCATION

DEPARTMENT B

GROUP 5

ELEMENTARY EDUCATION

- Class 8. Kindergarten.
- Class 9. Elementary grades.
- Class 10. Training and certification of teachers.
- Class 11. Continuation schools, including evening schools, vacation schools and schools for special training.
- Class 12. Vocational education toward specific training and occupation.

Legislation, organization, general statistics.
School supervision and school management.
Buildings; plans, models; school hygiene.
Methods of instruction; results obtained.

GROUP 6

SECONDARY EDUCATION

- Class 13. High schools and academies, manual training schools, commercial high schools.
- Class 14. Training and certification of teachers.

Legislation, organization, statistics.
Buildings: plans and models.
Supervision, management, methods of instruction, results obtained.

GROUP 7

HIGHER EDUCATION

- Class 15. College examination and inspection boards in relation to college entrance requirements.
- Class 16. Colleges and universities.
- Class 17. Scientific, technical and engineering schools and institutions.
- Class 18. Professional schools.
- Class 19. Libraries.
- Class 20. Museums.

Legislation, organization, statistics.
Buildings: plans and models.
Curricula, regulations, methods, administration, investigations, etc.

GROUP 8

SPECIAL EDUCATION IN FINE ARTS

(Institutions for Teaching Drawing, Painting and Music.)

Class 21. Art schools and institutes.

Class 22. Schools and departments of music, conservatories of music.

Methods of instruction; results obtained.

Legislation, organization, general statistics.

GROUP 9

SPECIAL EDUCATION IN AGRICULTURE

Class 23. Agricultural education in the elementary and secondary schools.
Boys' and Girls' Agricultural Clubs.

Class 24. Agricultural colleges and departments, experiment stations, instruction in forestry; methods and results.

Curricula, experiments and investigations, results.

Methods of transportation and shipment.

Legislation, organization, general statistics.

Buildings: plans and models.

GROUP 10

SPECIAL EDUCATION IN COMMERCE AND INDUSTRY

Commercial Education

Class 25. Business and commercial schools, higher instruction in commerce.

GROUP 10-A

Industrial Education

Class 26. Industrial and trade schools, evening industrial schools.

Class 27. Education of the Indian.

Class 28. Education of the Negro.

GROUP 11

EDUCATION OF THE SUBNORMAL

Class 29. Education of defectives and delinquents.

Class 30. Institutions for the blind, publications for the blind.

Class 31. Institutions for the deaf and dumb.

Class 32. Institutions for the feeble-minded.

Class 33. Special schools for cripples.

Class 34. Open-air schools for tubercular children, etc.

Management, methods, courses of study, results.
Special appliances for instruction.
Legislation, organization, statistics.
Buildings: plans and models.

GROUP 12

SPECIAL FORMS OF EDUCATION, TEXT BOOKS, SCHOOL FURNITURE AND SCHOOL APPLIANCES

- Class 35. Summer schools.
- Class 36. Extension courses; popular lectures and people's institutes; correspondence schools.
- Class 37. Scientific institutions, societies and associations; scientific expeditions and investigations.
- Class 38. Educational publications, text books, etc.
- Class 39. School furniture, school appliances.

GROUP 13

PHYSICAL TRAINING OF THE CHILD AND ADULT

- Class 40. Lectures and conventions, physiology and hygiene of exercise, anthropometry, school games, school exercises, theory of physical training, etc.
- Class 41. Exhibits of work, photographs and plans of gymnasiums, fields, classes, teams, etc.
- Class 42. Exhibits of class work illustrative of school work, systems of gymnastics, etc.

SOCIAL ECONOMY

DEPARTMENT C

GROUP 14

AGENCIES FOR THE STUDY, INVESTIGATION AND BETTERMENT OF SOCIAL AND ECONOMIC CONDITIONS

- Class 43. Public bureaus, offices, commissions, etc.
- Class 44. Societies: humane, institutional, church and other. Private agencies, commercial organizations, museums, etc.
- Class 45. Economic and social reform associations, special educational agencies, literature, congresses.
- Class 46. Surveys and special community investigations.

GROUP 15

ECONOMIC RESOURCES AND ORGANIZATIONS

- Class 47. Physical resources and characteristics, location and organization of industrial enterprises, general industrial statistics. Governmental promotion of industry.
- Class 48. Conservation of national resources.

GROUP 16

DEMOGRAPHY, EUGENICS

- Class 49. Composition, characteristics and movement of population; statistical methods, machines and appliances employed.
- Class 50. Immigration.
- Class 51. Eugenics.

GROUP 17

HYGIENE

- Class 52. Vital statistics.
- Class 53. Growth and nutrition, food.
- Class 54. Hygiene of infancy and childhood.
- Class 55. Communicable diseases.
- Class 56. State and municipal hygiene, public-health work and health laboratories.
- Class 57. Care of the sick, nursing. Care of defectives. Life saving.
- Class 58. Industrial hygiene, occupational diseases.
- Class 59. Special hygiene: traffic and transportation, military, naval, tropic, mental, sex, dental.
- Class 60. Educational publicity.

GROUP 18

ALCOHOL, DRUGS AND TOBACCO

- Class 61. Physiological and other effects of alcohol, drugs and tobacco. Statistics of consumption and economic cost. Organized efforts for lessening intemperance and use of drugs and tobacco.
- Class 62. Legal regulation of trade in liquor, drugs and tobacco. Private and public management of liquor trade.

GROUP 19

LABOR

- Class 63. Regulation and inspection of factories, mines and other work. Woman and child labor.
- Class 64. Organization of employees. Organization of employers.
- Class 65. Systems of industrial remuneration. Wages and cost of living.
- Class 66. Industrial disputes and their settlement. Statistics of unemployment, treatment of unemployed.
- Class 67. Statistics of industrial accidents and means for prevention. Employers' liability. Workmen's compensation.
- Class 68. Welfare work.

GROUP 20

CO-OPERATIVE INSTITUTIONS

- Class 69. Co-operative societies for production and distribution.
- Class 70. Co-operative credit and banking institutions, rural credit systems.
- Class 71. Co-operative building societies.
- Class 72. Co-operative agricultural societies.

GROUP 21

BANKS AND PROVIDENT INSTITUTIONS

- Class 73. National, state and private banks; loan and trust companies.
- Class 74. Savings banks, postal savings banks, provident savings and loan institutions.
- Class 75. Insurance: life, fraternal, accident, fire, marine, fidelity, and other forms.
- Class 76. Social insurance. Retirement provisions for public employees.

GROUP 22

CHARITIES AND CORRECTION

- Class 77. Care of dependent and neglected children.
- Class 78. Institutional care of destitute adults. Institutional care of defectives.
- Class 79. Relief of needy families in their homes.
- Class 80. Preventive social work. Supervisory and educational movements.
- Class 81. Statistics of crime. Identification of criminals.

- Class 82. Prisons, jails, work-houses, lock-ups. Prison labor, peonage.
- Class 83. Reformatories; education of delinquents.
- Class 84. The juvenile offender. Defective delinquents.
- Class 85. Indeterminate sentence, probation and parole. Aid and relief.

GROUP 23

PREPARATION, ENACTMENT AND ENFORCEMENT OF LEGISLATION

- Class 86. Legislative reference bureaus, commissions, etc. Operation of initiative, referendum and recall. Results of efforts for uniform state and municipal legislation. Police systems and police administration. Courts. Reform in court procedure.

GROUP 24

NOMINATION AND ELECTION SYSTEMS

- Class 87. Qualifications of voters. Party organization. Nomination and election systems. Australian ballot, short ballot, voting machines. Restrictions and publicity of election expenditures. Corrupt practice legislation.

GROUP 25

PUBLIC UTILITIES AND THEIR REGULATION

- Class 88. State, municipally and privately owned utilities. Public service commissions.

GROUP 26

MUNICIPAL ADVANCEMENT

- Class 89. Municipal statistics.
- Class 90. Local government and the State. Charters. Systems of government.
- Class 91. Municipal activities; methods, instrumentalities and results.
- Class 92. Public and private agencies for promoting economy and efficiency.

GROUP 27

- Class 93. Town and city planning. Housing.

GROUP 28

RECREATION

- Class 94. Parks, playgrounds and recreation centers. Baths, swimming pools and bathing beaches. Utilization of school house as social center. Public entertainments. Commercial recreation.

LIBERAL ARTS

DEPARTMENT D

GROUP 29

TYPOGRAPHY—VARIOUS PRINTING PROCESSES

(Equipment, Processes and Products.)

- Class 95. Machinery, presses and other apparatus used in typography, lithography, copper-plate printing, autography, engraving on stone, copper, zinc, aluminum, etc.
- Class 96. Machinery used for photo-mechanical printing.
- Class 97. Equipment, apparatus and products of type foundries, and other auxiliary and miscellaneous printing office appliances and labor-saving devices of stereotyping, electrotyping, electrolytic appliances and processes; electro-thermic appliances and processes.
- Class 98. Machines for setting and distributing type, casting type, etc.
- Class 99. Special equipment for printing bank notes, postage stamps, bonds, etc.
- Class 100. Typewriting machines and devices for duplication of copy, mimeograph, neostyle, addressing machines, dictating machines, etc.
- Class 101. Specimens in black and color typography, lithography, copper-plate printing and other methods of printing.
- Class 102. Specimens of engravings and drawings obtained, reproduced, enlarged or reduced by photo-mechanical processes.

GROUP 30

BOOKS AND PUBLICATIONS—BOOK BINDING

- Class 103. Newspapers, reviews and other periodicals and publications; newspaper and magazine offices or plants shown by models or photographs; means and methods of advertising, news gathering, etc.; methods and processes of publication. (Technical and trade publications may be displayed in the Departments with which they are allied.)
- Class 104. Collections of books, forming special libraries.
- Class 105. New books and new editions of old books.
- Class 106. Drawings for book, newspaper and magazine illustration, atlases, albums.
- Class 107. Musical publications.
- Class 108. Musical scores.
- Class 109. Equipment and processes of making stitched books and of book binding.
- Class 110. Specimens of binding, stamping, embossing, gilding, etc.
- Class 111. Artistic book binding.

GROUP 31

MAPS AND APPARATUS FOR GEOGRAPHY, COSMOGRAPHY, TOPOGRAPHY

- Class 112. Maps, charts and atlases; geographical, topographical, geological, hydrographical, astronomical, etc.
- Class 113. Topographic models in relief.
- Class 114. Terrestrial and celestial globes; statistical works and tables.
- Class 115. Statistical tables and nautical almanacs for the use of astronomers, surveyors and seamen.

GROUP 32

MANUFACTURE OF PAPER

(Raw Materials, Equipment, Processes and Products.)

- Class 116. Collections of raw materials used in the manufacture of paper and card-board.
- Class 117. Equipment and processes used in making pulp from rags, straw, wood, etc.
- Class 118. Appliances and processes used in the manufacture of paper by hand.
- Class 119. Equipment and processes used in the manufacture of paper by machinery. Machines for producing endless paper. Apparatus for cutting, glazing, calendering, polishing.
- Class 120. Apparatus and processes used in the manufacture of special papers and of card-board.
- Class 121. Paper mill products, including papers of common and special grades not made up: paper for newspapers, books, maps, bank notes, drawings; photographic and art papers; paper for stationery; packing, wrapping and blotting paper; filter and laboratory paper; building and stock for wall paper; mill board, and card-board; papier maché, compressed paper, etc.

GROUP 33

PHOTOGRAPHY

(Equipment, Processes and Products.)

NOTE: Photographs relating to any exhibit may be shown in connection therewith in any exhibit palace.

- Class 122. Materials, instruments and apparatus of photography, equipment of photographic studios, stereopticons, mutographs, kinetoscopes, moving pictures, etc.
- Class 123. Negative and positive photography on glass, paper, wood, cloth, films, enamel, etc. Photogravure in intaglio and in relief; photocollography, photolithography. Stereoscopic prints. Enlarged and micrographic photographs. Color photography. Direct, indirect and photo-color printing. Scientific and other applications of photography.
- Class 124. Pictorial photography.

**INSTRUMENTS OF PRECISION, PHILOSOPHICAL APPARATUS,
ETC., COINS AND MEDALS**

(Equipment, Processes and Products.)

- Class 125. Laboratory apparatus for physical investigations; mathematical instruments; instruments for practical geometry; instruments for refined physical measurement; sensitive balances, high grade thermometers, indicators, integrators, chronographs, etc. Lecture room apparatus.
- Class 126. Instruments for and methods of land surveying, including plane, topographic and geodetic surveying. Surveyors' compasses, leveling instruments, transits, geographic instruments, pedometers, heliotropes, etc.
- Class 127. Astronomical instruments and methods; telescopes and fittings, astronomical photographic apparatus and photographs; reflectors, helioscopes, astronomical clocks.
- Class 128. Navigation instruments and equipment; including sextants, mariners' compasses, alidades, patent logs, sounding machines, chronometers, etc. Meteorological instruments, thermometers, barometers, wind current meters, etc.
- Class 129. Electrical instruments and apparatus for scientific investigations or research work; electrical furnaces for laboratory use; thermal batteries; electrical standards.
- Class 130. Photometry: apparatus for determining the intensity, distribution and illuminating power of light. Standards.
- Class 131. Transferred to Class 542.
- Class 132. Optical instruments for general use; telescopes, binoculars, opera, field and marine glasses, magnifying glasses. Lenses for testing vision; eye glasses and spectacles.
- Class 133. Calculating machines; cash registers; scales, weights and measures of various countries.
- Class 134. Equipment for the manufacture of coins and medals. Appliances for weighing the metal, testing the standard of alloys, melting and casting, rolling, stamping out, milling, washing, verification of weight of coins, counting, striking, and checking them before delivery; equipment for the preparation of stamps and dies, coins and medals; treatises upon coins, economical, statistical, etc.

GROUP 35

MEDICINE AND SURGERY

- Class 135. Appliances, instruments and apparatus for work in anatomy, histology and bacteriology; anatomical models; normal and pathological, histological and bacteriological preparations.
- Class 136. Apparatus for sterilizing instruments and wound-dressing appliances, and for other purposes of sterilization.

- Class 137. Instruments for general and special medical research.
- Class 138. Instruments and apparatus for general, special and local surgery.
- Class 139. Electricity as applied in therapeutics, surgery and dentistry; X-ray apparatus; electric sterilizers, ozonizers.
- Class 140. Appliances for dressing wounds.
- Class 141. Apparatus for plastic and mechanical prosthesis; orthopedic apparatus; apparatus for hernia; apparatus for medical gymnastics; material, instruments and apparatus for special therapeutics.
- Class 142. Instruments and apparatus used in the practice of dentistry; dental surgery, bridge and plate work, etc.
- Class 143. Appliances for the use of the infirm, of invalids, and of lunatics; artificial limbs, artificial eyes.
- Class 144. Chests and cases of instruments and medicines for the use of surgeons of the army and navy; appliances for rendering aid to the wounded on the field of battle; appliances for rendering aid in case of accident; ambulance service, etc.
- Class 145. Appliances for rendering aid to persons apparently drowned or asphyxiated.
- Class 146. Instruments and appliances for veterinary surgery.
- Class 147. Equipment and utensils used by druggists and pharmacists.

GROUP 36

CHEMICAL AND PHARMACAL ARTS

(Equipment, Processes and Products.)

- Class 148. Laboratory apparatus and utensils: lamps, blow-pipes; presses, drying ovens, filters; furnaces, ovens, etc., used in chemical laboratory work.
- Class 149. Apparatus and instruments for making industrial and commercial analyses.
- Class 150. Equipment and processes used in the chemical treatment of animal substances, with their products; superphosphates, soaps, candles, glycerine.
- Class 151. Apparatus and processes for the production by electrolysis of hydrogen peroxide, chlorine, hypochlorites, chlorates, soda, bleaching materials, and various other chemicals. Also electro-thermal apparatus and processes for chemical manufacture not otherwise specified.
- Class 152. Equipment and processes used in the manufacture of vegetable essences.
- Class 153. Transferred to Class 776.
- Class 154. By-products for pharmacal use obtained from the treatment of mineral substances such as petroleum and coal tar derivatives, etc.
- Class 155. Equipment and processes used in treating waste matter from factories (by chemical or electrical methods) with a view to permitting their return to water courses or to the atmosphere.

- Class 156. Equipment for charcoal work and the production of various derivatives; methylated spirit, acetone, acetic acid, tar, wood alcohol, pyroligneous acid. Products of charcoal burning.
- Class 157. Apparatus and processes for the compression and liquefaction of gas. Liquefied gases.
- Class 158. Apparatus and processes for the manufacture of artificial textiles.
- Class 159. Appliances and processes used in the manufacture of pharmaceutical products. Raw materials of pharmacy; sera and other biological products, as bacterines, vaccines, tuberculines, etc.; drugs of mineral, animal and vegetable origin, crude, powdered and compound; special appliances for collecting, cleaning, peeling, slicing, cutting and garbelling crude drugs.
- Class 160. Disinfectants; standardization of disinfectants; manufacture of disinfectants; drug preservation, drug sterilization, ampuls, etc.
- Class 161. Acids, alkalies, salts and compounds of every kind. Chemical elements derived from their compounds and chemical compounds not otherwise classified.
- Class 162. Refined sulphur and derivatives from sulphur.
- Class 163. Equipment and processes used, and products obtained in the manufacture of phosphorus and matches.
- Class 164. Drug adulteration; methods of adulteration; methods of detecting adulteration.
- Class 165. Various products of chemical industries; tanning materials, waxes, essential oils, glue and gelatine; perfumes, cosmetics and extracts; various glazes, printing ink, blacking.
- Class 166. (Transferred to Manufactures and Agriculture.)
- Class 167. (Transferred to Mines and Metallurgy.)
- Class 168. Alcohols modified for industrial purposes.
- Class 169. Equipment and appliances for producing calcium carbide, and for the storage of acetylene gas.
- Class 170. Insecticides; fungicides; parasiticides and methods of manufacture and use.
- Class 171. Pyrotechnics, bombs, signals, etc.

GROUP 37

MUSICAL INSTRUMENTS

(Materials, Processes and Products.)

- Class 172. Materials and processes for manufacturing musical instruments.
- Class 173. Wind instruments of metal or wood, having openings with or without keys, simple mouth pieces, pipes or reeds, with or without reservoir of air.
- Class 174. Metal wind instruments, plain or with lengthening pieces, slides, pistons, keys or reeds.
- Class 175. Wind instruments with key-board; organs, accordions, etc.
- Class 176. Stringed instruments without key-board, played with the fingers or with a bow.

- Class 177. Pianos, player pianos, and other stringed instruments with keyboard.
- Class 178. Instruments played by percussion or friction; drums and cymbals.
- Class 179. Automatic instruments: barrel organs, bird organs, musical boxes, piano and organ players, bandonians, orchestrians, etc.
- Class 180. Phonographs, talking machines, graphophones and similar devices.
- Class 181. Separate parts of musical instruments and orchestral appliances; strings for musical instruments.

GROUP 38

THEATRICAL APPLIANCES AND EQUIPMENT

- Class 182. Interior equipment and special furniture for theaters.
- Class 183. Arrangements for preventing and extinguishing fires. (See also Class 463.)
- Class 184. Scenery; curtains, metallic curtains, gauzes, nets; colors, brushes, palettes, cordage; special iron work; lighting; electrical apparatus, candelabra, colored screens, apparatus for imitating flame, smoke, lightning, fireworks; projections; spectres; phosphorescence.
- Class 185. Machinery; windlasses, drums, chests, traveling platforms, slides, trolleys, traps, counterweights, flies.
- Class 186. Costumes; special materials, printing on different materials, armor; jewelry; foot-gear; dancing shoes; wigs, beards, make-up; paints for making up.
- Class 187. Properties for the imitation of various phenomena, such as thunder, hail, wind, snow, gun-firing; card-board work of all kinds; furniture made in perspective.

GROUP 39

ELECTRICAL METHODS OF COMMUNICATION

- Class 188. Telephone, telegraph and wireless instruments, dictographs, devices for the deaf, etc.; their apparatus and specific equipment.
- Class 189. Fire alarm systems and equipment; police signals and patrol box systems and equipment; electric annunciators and other electric signal apparatus not classified.

GROUP 40

CIVIL AND MILITARY ENGINEERING

- Class 190. (Transferred to Mines and Metallurgy.)
- Class 191. Methods of testing structural materials, and apparatus used therefor.
- Class 192. (Transferred to Class 215.)

- Class 193. Methods used in earth work, such as the construction of canals, railroads, levees, embankments, etc.
- Class 194. Equipment and methods for the construction and maintenance of roads, streets, promenades and highways.
- Class 195. Equipment for and methods used for preparing foundations; piles, pile-drivers, screw-piles, pneumatic apparatus, caissons, diving apparatus, wire trams, etc.
- Class 196. Passenger elevators, pneumatic tubes, etc.
- Class 197. Military defenses and accessories: engineering material employed in the operation of an army.
- Class 198. (Transferred to Classes 197 and 532.)
- Class 199. Equipment for and methods used in storing and distributing water. (See Class 759 for special methods in mining.)
- Class 200. Equipment for and methods of city sanitation.

GROUP 41

MODELS, PLANS AND DESIGNS FOR PUBLIC WORKS

- Class 201. Roads and other public highways. Construction and maintenance of streets in cities.
- Class 202. Inland navigation; improvement of rivers, construction of canals, dams, locks, lifts, ship railways, reservoirs, spillways and feeders; dredges, pile sinkers, pile drivers, current deflectors, scraping and water-jet devices for removing sand-bars, etc.; pumping stations, mechanical towing and warping; equipment used for the development of river ports.
- Class 203. Sea ports (general arrangements); piers, docks, jetties, basins; equipment for development (not including shipping).
- Class 204. Bridges and viaducts; railway, road and foot bridges.
- Class 205. Maritime canals.
- Class 206. Protection against flooding by rivers or by sea; levees, dikes and sea walls.
- Class 207. Railways as regards plan and profile of the line, and engineering works, subways, elevated lines, tunnels.
- Class 208. Statistics, maps and publications relative to public works; transactions and other features pertaining to engineering societies.

GROUP 42

ARCHITECTURE

- Class 209. Drawings, models and photographs of completed buildings.
- Class 210. Drawings, models and photographs of artistic architectural details.
- Class 211. Designs for mosaics and for mosaic and leaded glass.

GROUP 43

ARCHITECTURAL ENGINEERING

- Class 212. Models and working plans of public and commercial buildings, large and small dwelling houses, flats, apartment houses, and other architectural structures.
- Class 213. Models, detail drawings and specifications for foundations, walls, partitions, floors, roofs and stairways, wood and metal framing, etc.
- Class 214. Designs and models of special contrivances for safety, comfort, and convenience in the operation of moving stairways, doors, windows, house signals, fire escapes, ventilators, etc.
- Class 215. Working plans for the trades, mason, carpenter, etc., connected with building construction; designs and models of bonds, arches, coping, vaulting, etc.; plastering and construction of partitions.

MANUFACTURES AND VARIED INDUSTRIES

DEPARTMENT E

GROUP 44

STATIONERY, DESK ACCESSORIES, ARTISTS' MATERIALS

- Class 216. Equipment for and processes used in making or preparing stationery, account books, copy books, envelopes, bags, wrappers.
- Class 217. Made-up paper and card-board; ruled, bordered or ornamented paper, note paper, envelopes, pockets, bags; school copy books, memorandum books, note books, letter-copying books, account books, book covers; menu cards, playing cards, paper boxes, cases; packages of cigarette papers, etc.
- Class 218. Desk furnishings, inks, pens, pencils, penholders, crayon holders, wax and wafers, paper weights, ink stands, letter presses, etc.
- Class 219. Artists' materials for painting, architecture, sculpture, pyrography, and drawing; canvases, panels, crayons, brushes, hair pencils; mathematical instruments for architects, etchers, engravers, burners, sculptors; tracing papers and cloths; parchments; colors, varnishes, charcoals, pastels, stumps, lay figures, easels; color boxes and other artists' material not named above.

GROUP 45

CUTLERY

- Class 220. Special equipment for the manufacture, grinding and polishing of cutlery.
- Class 221. Table cutlery, pocket knives, knives with fixed blades.
- Class 222. Cutlery for gardens, and for various trades.
- Class 223. Scissors and work-box accessories.
- Class 224. Razors of all kinds.
- Class 225. Fine cutlery in polished steel.
- Class 226. Small silversmiths' ware.
- Class 227. Side arms of all kinds.

GROUP 46

SILVERSMITHS' AND GOLDSMITHS' WARE

(Appliances, Processes and Products.)

- Class 228. Special equipment for manufacture, hand tools; outfits for casting; machinery (lathes, scales, etc.); outfits for electro-plating, etc. Methods of work.
- Class 229. Goldsmiths' and silversmiths' work for religious or common uses in gold, silver, bronze or other metal; plated ware; articles gilt or silver-plated by any process.
- Class 230. Enameled work: goldsmiths' enamel; enamels painted upon metal.

GROUP 47

JEWELRY

(Equipment, Processes and Products.)

- Class 231. Special equipment. Methods of work.
- Class 232. Fine jewelry; gold and silver jewelry; jewelry in platinum, aluminum, etc.; jewelry set with precious stones; jewelry in debased gold for exportation.
- Class 233. Lapidary work; diamond cutting; cutting of gems; engraving of fine stones; engraving of hard cameos and of shells.
- Class 234. Imitation lapidary work. Imitation of precious stones, pearls, etc.
- Class 235. Gilt jewelry; imitation jewelry in copper and other metals; steel jewelry; mourning jewelry in jet and glass; jewelry in coral, amber, mother-of-pearl, etc.

GROUP 48

CLOCK AND WATCH MAKING

(Equipment, Processes and Products.)

- Class 236. Special equipment for manufacturing clocks and watches; hand tools; machine tools (lathes and other tools); measuring instruments.
- Class 237. Preparation of various metals used by watch and clock makers; separate parts of watch and clock work; springs; watch cases in precious or common materials; holes and fittings in rubies or in other jewels; enameled or other dials, etc.
- Class 238. Clocks for churches and public buildings, time recorders.
- Class 239. Astronomical clocks. Marine chronometers.
- Class 240. Clocks moved by electricity, air or water.
- Class 241. Ornamental clocks and timekeepers; regulators; alarm clocks.
- Class 242. Watches; pocket chronometers; watchmen's time registers.
- Class 243. Metronomes, various recording instruments. Clepsydras and hour glasses.
- Class 244. Chimes connected with clock work.

GROUP 49

OBJECTS EXHIBITED MORE FOR THEIR ORNAMENTAL DESIGN THAN FOR THEIR UTILITY

- Class 245. Special designs and patterns in glass.
- Class 246. Special designs in earthenware, pottery or porcelain.
- Class 247. Special designs in metal.
- Class 248. Special designs in leather.
- Class 249. Special designs in wood.
- Class 250. Special designs in textiles.

**ORNAMENTAL PRODUCTIONS IN MARBLE, BRONZE, CAST IRON
AND WROUGHT IRON**

(Equipment, Processes and Products.)

- Class 251. Special equipment for the manufacture of ornamental metal objects; types of foundries; patterns and moulds. Outfit for and specimens of repoussé work; processes for mechanical reduction.
- Class 252. Reproductions of works of art in marble, stone, plaster, terra cotta, wax, etc. Ornamentally stamped and damascened metals.

GROUP 51

LEADED, STAINED AND MOSAIC GLASS

- Class 253. Glass for churches, public buildings and private dwellings. Specimens of various kinds of glass used for decorative windows. Special enamels.

GROUP 52

**BRUSHES, FINE LEATHER ARTICLES, FANCY ARTICLES AND
BASKET WORK**

(Equipment, Processes and Products.)

- Class 254. Equipment and methods used in the manufacture of brushes, fine leather articles, fancy articles and basket work.
- Class 255. Brushes; toilet brushes designated as fine brushes; brushes for household, harness and stable use, etc., designated as coarse brushes; brushes for house painting, designated as paint brushes; feather brushes; brooms; floor brushes.
- Class 256. Fine leather goods; scabbards, portmonnaies, portfolios, toilet cases, note book covers, cigar cases, small objects and fancy articles in skins; clasps for portmonnaies and handbags.
- Class 257. Fancy articles; work boxes and small fancy furniture; liquor cases, glove boxes, jewel cases; turned articles, engine turned, carved, engraved in ivory, tortoise shell, mother-of-pearl, etc., pipes and smokers' articles, snuff boxes; toilet and other combs in ivory, tortoise shell, horn, celluloid, boxwood, etc.; various articles in lacquer work, small bronzes.
- Class 258. Basket work; basket and hampers for common use; fancy baskets for confectioners, for household use, traveling, etc.

GROUP 53

**ARTICLES FOR TRAVELING AND FOR CAMPING. INDIA RUBBER
AND GUTTA PERCHA INDUSTRIES**

- Class 259. Trunks, valises, bags, satchels, baskets, dressing and traveling cases; packing cases and boxes; shawl straps, etc. Locks and other fittings for trunks, valises, etc. Cushions. Alpenstocks, grapnels, parasols. Various requisites for travelers.

- Class 260. Portable equipment specially prepared for traveling and for scientific expeditions; outfits for geologists, mineralogists, naturalists, colonists, pioneers, explorers, etc.
- Class 261. Tents and accessories. Beds, hammocks, seats, folding chairs, and other camp furniture and equipment. Portable houses.
- Class 262. Tents and furniture of military types.
- Class 263. Equipment and methods used in the manufacture of India rubber and gutta percha goods.
- Class 264. Commercial products of the India rubber and gutta percha industry. Waterproof clothing and boots and shoes. Rubber floor covering. Substitutes for rubber.

GROUP 54

HUNTING EQUIPMENT AND PRODUCTS OF HUNTING

- Class 265. Sportsmen's and trappers' arms and accessories; sportsmen's ammunition.
- Class 266. Hunting equipment; appliances for training dogs.
- Class 267. Material, dress and equipment for games and sports. Sporting goods and supplies; track paraphernalia.
- Class 268. Skins and furs in the rough; skins prepared for the furrier. Taxidermists' work.
- Class 269. Horn, ivory, bone, tortoise shell.

GROUP 55

FISHING EQUIPMENT AND PRODUCTS

- Class 270. Floating appliances used in fishing. Nets, tackle, boats; devices and implements for sea fishing. Nets, traps and appliances for fresh water fishing.
- Class 271. Anglers' apparel, rods, reels and lines.
- Class 272. Machines and equipment for making nets.
- Class 273. Sea and fresh water pearls; pearl shells and mother-of-pearl; sponges; corals.

GROUP 56

TOYS

- Class 274. Equipment and processes used in the manufacture of toys.
- Class 275. Playthings: dolls, talking dolls and accessories, playthings in metal, dolls' dinner and tea services, children's watches, mechanical toys, arms and equipment for children, musical instruments, dolls' furniture, horses, animals, carts, toys in India rubber and in gold beaters' skin, scientific and educational toys. Games. Children's books.

GROUP 57

PERMANENT DECORATION AND FIXED FURNITURE FOR BUILDINGS AND DWELLINGS

- Class 276. Plans, drawings and models of interior decorations.

- Class 277. Carpentry; models of frame work, roof work, vaults, domes, wooden partitions, etc.
- Class 278. Ornamental joiner work; doors, windows, panels, inlaid floors, organ cases, choir stalls, etc.
- Class 279. Permanent decorations in marble, stone, plaster, papier-maché, carton pierre, etc.
- Class 280. Ornamental carvings and pyrographies.
- Class 281. Iron work and locksmiths' work applied to decoration; grill work and doors in cast or wrought iron; doors and balustrades in bronze; roof decoration in lead, copper, zinc; dormers, spires, finials, vanes; crest and ridge work.
- Class 282. Decorative paintings on stone, wood, metal, canvas or other surfaces. Signs of all varieties.
- Class 283. Mosaic decorations in stone or marble for flooring; enameled mosaic for walls and vaulted surfaces.
- Class 284. Various applications of ceramics to the permanent decoration of public buildings and dwellings. (See also Ceramics.)

GROUP 58

OFFICE AND HOUSEHOLD FURNITURE AND UTILITIES

- Class 285. Sideboards, bookcases, tables, stands, beds, mirrors, desks, files, filing systems, cabinets, wardrobes, chiffoniers, chairs, settees, couches and lounges, billiard tables, etc.; vacuum cleaners, carpet sweepers, washing machines, etc.

GROUP 59

MORTUARY MONUMENTS AND UNDERTAKERS' FURNISHINGS

- Class 286. Marble, stone and metal monuments; mausoleums and fittings.
- Class 287. Coffins, caskets and undertakers' furnishing goods.

GROUP 60

HARDWARE AND WOODENWARE

- Class 288. Special tools (not included in the class of machine tools) used by smiths, farriers, bolt makers, screw cutters, wire drawers, nail makers, buckle makers, chain makers, copper-smiths, tin-smiths, edge tool makers, iron founders, ironmongers, locksmiths, model makers, etc.
- Class 289. Hardware not otherwise provided for, made of plates, forgings, or castings. Fittings, cocks, taps, etc. Bells; buckles; machine-made bronzes; shoes for horses and for other animals; flatirons, etc.
- Class 290. Bolts, nuts and screws for wood or metal.
- Class 291. Products of nail making and wire drawing: nails, brads, tacks, staples; wire ropes, barbed wire, wire fencing, wire cloth, and wire gauze; wire springs; rings and hooks.
- Class 292. Chain making products and kindred industries.
- Class 293. Metal plates, flanged, stamped, decorated, perforated, etc., builders' work in sheet metals.

- Class 294. Enameled plates and castings for buildings, household and general use.
- Class 295. Hollow ware (cast or pressed) plain, polished, japanned, enameled, granitized or porcelain lined. Metal household utensils.
- Class 296. Articles from the re-manufacture of sheet metals, produced by cutting, drawing, stamping, spinning; including caps, ferrules, small boxes, cans metal vessels, lamp shades, etc.
- Class 297. Woodworking hand tools; axes, adzes, hatchets, chisels, planes, boring tools, saws, hammers, etc.
- Class 298. Builders' and upholsterers' hardware; fittings and fastenings for doors, windows, etc.; casters, clamps, brackets, pulls, etc.
- Class 299. Safes, safety vaults and accessories; safe locks.
- Class 300. Metal work (cast, wrought, or wire) for stair railings, balusters, gratings, balconies, grill work, etc.
- Class 301. Metal work (plated, enameled, etc.) for bed-steads, gas and electric light fixtures, store fixtures, cash carriers, etc.
- Class 302. Summer houses and pavilions in metal; lawn bird cages, aviaries, awnings, awning fittings, verandas.
- Class 303. Metal shutters for windows, doors; screens and Venetian blinds.
- Class 304. Various products of exact rolling or of beating of gold, silver and tin; metallic foils.
- Class 305. Various hardware products of gilding, silver-plating, copper-plating, bronzing, galvanizing, nickel-plating, electro-plating.
- Class 306. Woodenware for household use. Miscellaneous manufactured articles of wood not otherwise classified. Baskets and boxes of split wood.

GROUP 61

ELECTRO-THERMAL APPARATUS

- Class 307. Electric cooking devices, clothes pressing irons, air heaters, etc.

GROUP 62

INSULATING MATERIALS FOR ELECTRICITY

- Class 308. Insulating materials of mica, glass, rubber, porcelain and other substances; insulating compounds and fabrics. (For devices made of insulating materials see Class 510.)

GROUP 63

PAPER HANGING

(Raw Materials, Equipment, Processes and Products.)

- Class 309. Special raw materials used in the manufacture of wall paper.
- Class 310. Machinery for printing wall paper and fancy papers. Machines for engraving printing rollers. Flat wood blocks or copper plates, engraved by hand. Drawing pens. Machines for varnishing, glazing, calendering, embossing, gilding, flocking, rolling and cutting.
- Class 311. Special brushes and cloths used in the laying of wall paper.

- Class 312. Stained papers, printed papers. Flocked, marbled, veined, gilt, enameled and glazed paper. Imitations of wood, leather and tapestry.

GROUP 64

CARPETS, TAPESTRIES AND FABRICS FOR UPHOLSTERY

(Materials, Equipment, Methods and Products.)

- Class 313. Special machinery for the manufacture of carpets and tapestry; high warp looms, low warp looms, bobbin-winders, etc.
- Class 314. Carpets, moquette, tapestry, brussels, or velvet. Felt carpets, mats, etc.
- Class 315. Furniture and wall covering materials in silk, wool, cotton, linen, jute, ramie, grass, plain, mixed, brocaded, printed, embroidered. Horse-hair cloths, vegetable leather, moleskin, etc. Leather for hangings and for covering furniture. Oil cloths, linoleums and similar floor coverings.

GROUP 65

UPHOLSTERERS' DECORATIONS

- Class 316. Decoration for public and private festivals, for religious services, etc. Buntings, flags.
- Class 317. Bed furnishings; upholstered chairs; canopies, curtains, window shades and fittings; hangings of cloth or tapestry; frames; etc.

GROUP 66

CERAMICS

(Raw Materials, Equipment, Processes and Products.)

- Class 318. Raw materials, particularly chemical products used in ceramic industries.
- Class 319. Equipment and methods used in the manufacture of earthenware; machines for turning, pressing and moulding earthenware; furnaces, kilns, muffles, and baking apparatus for earthenware; appliances for preparing and grinding enamels.
- Class 320. Various porcelains.
- Class 321. Bisque of porcelain and of earthenware.
- Class 322. Earthenware of white or colored body, with transparent or tin glazes. Faience.
- Class 323. Earthenware and terra cotta for agricultural purposes.
- Class 324. Stoneware, plain and decorated.
- Class 325. Tiles, plain, encaustic and decorated; mosaics, tiles and bricks for floors. (See also Group 153.)
- Class 326. Fire-proof materials. (See also Group 153.)
- Class 327. Statuettes, groups and ornaments in terra cotta.

- Class 328. Enamels applied to ceramics.
Class 329. Borders for fireplaces and mantels.

GROUP 67

PLUMBING AND SANITARY MATERIALS

- Class 330. Sanitary earthenware; bathing apparatus and attachments, lavatory fittings, laundry tubs, basins, cocks, draws, etc.; sewerage apparatus, plumbers' appliances.

GROUP 68

GLASS AND CRYSTAL

(Raw Materials, Equipment, Processes and Products.)

- Class 331. Raw materials and particularly chemical products used in the manufacture of glass.
Class 332. Equipment and processes used in the manufacture of glass and crystal; equipment for the preparation of raw materials; furnaces; blowing apparatus; moulds; lathes for engraving and shaping; apparatus for cutting and for casting, etc.
Class 333. Window glass, white or colored, fluted, curved, enameled, etc. Glass for photography.
Class 334. Plate glass, rough or polished. Silvered glass. Glass for pavements. Mirrors for projections. Glass with surface in relief.
Class 335. Table glass; glass crystal, white or colored, cut or engraved; glassware and glass apparatus for scientific uses.
Class 336. Ornamental glass. Fused quartz products.
Class 337. Bottles.
Class 338. Enamels; their application to glass.
Class 339. Mosaics of glass. (Architectural mosaics excepted.)
Class 340. Imitation of precious stones.
Class 341. Watch glasses.
Class 342. Glass used for optical purposes; spectacle glass. Lens grinding machinery.

GROUP 69

APPARATUS AND PROCESSES FOR HEATING AND VENTILATION

- Class 343. Plans and models showing methods of heating buildings, including public buildings, factories, dwelling houses. Plans and models for sanitation and ventilation of kitchens and small living rooms.
Class 344. Methods of conveying and distributing steam, hot water and hot air, used separately or in combination.
Class 345. Plans, methods and equipment for natural ventilation; ventilation by exhaustion; up-draft ventilators; ventilators operated by wind or by difference of temperature; ventilation by mechanical means and their combination.

- Class 346. Stoves, furnaces and boilers, peculiar to the various systems of hot air, hot water and steam heating. Heating stoves using wood, coal, gas or other fuel. Fittings for same.
- Class 347. Radiators of heat used in connection with heating systems.
- Class 348. Kitchen ranges and fittings, steam cooking ranges, hot water boilers, combined cooking and heating stoves, special forms of cooking stoves and apparatus. Ranges and other kitchen equipment for preparing food in large quantities. Cooking utensils.
- Class 349. Accessories to heating and ventilation. Measuring and registering apparatus; ordinary and self-registering thermometers, pyrometers, anemometers; regulators of temperature, of draft, of pressure; automatic drip cocks and air cocks, cocks especially fitted for heating apparatus, electric thermostats.
- Class 350. Chimney fittings. Dampers for chimneys, flue stoppers, special sheet iron chimney pots. Openings for hot air and ventilation; gratings and plates.
- Class 351. Stoves and chimneys in earthenware. Fireplace and chimney pottery. Earthenware and refractory materials for heaters, stoves and chimneys.
- Class 352. Hearth furnishings; fire lighters; ash sifters; utensils for cleaning and repairing heaters and stoves; other accessories.

GROUP 70

MANUFACTURE, DISTRIBUTION AND USES OF GAS FOR LIGHT AND FUEL

- Class 353. Manufacture of gas: processes and apparatus for manufacturing gas from coal; processes and apparatus for manufacturing water gas; processes and apparatus for manufacturing oil gas; apparatus and materials for the physical and chemical cleansing of gas; apparatus for testing crude materials and manufactured gas.
- Class 354. Distribution of gas: pipe, pipe fittings, valves, pressure-regulating apparatus; tools used in laying mains or services; meters and gas measuring apparatus; appliances for the transmission of gas, including exhausters and compressors. (See Class 464.)
- Class 355. Uses of gas: incandescent gas lamps and mantels, gas burners, and appliances for gas lighting; appliances for cooking by gas; appliances for heating by gas, including water heaters and hot air furnaces; appliances for utilizing gas for industrial purposes.

GROUP 71

APPARATUS AND METHODS FOR LIGHTING, NOT OTHERWISE CLASSIFIED

- Class 356. Lighting by means of vegetable or mineral oils, petroleum, shale heavy oil, heavy oil sprayed. Lamps, burners, wicks, lamp chimneys, and other accessories. Apparatus for domestic, industrial and public lighting.

- Class 357. Lighting by acetylene gas or vaporized gasolene, alcohol, etc. Lamps, burners, chimneys, and other accessories and apparatus for domestic, industrial and public lighting.
- Class 358. Accessories to lighting: lighters, glasses, globes, shades, reflectors, screens, smoke consumers, chandeliers and fixtures.

GROUP 72

TEXTILE MATERIALS, SPINNING AND ROPE MAKING*

- Class 359. Machinery and apparatus used in preparing and spinning textile materials. Specimens of materials showing progress of work.
- Class 360. Detached parts of spinning machinery and special machines for their manufacture.
- Class 361. Apparatus used in subsequent operations; spooling, winding, twisting, throwing. Mechanical finishing of goods.
- Class 362. Apparatus for sorting, testing and registering. Apparatus for perfecting. Equipment for making cordage.

GROUP 73

EQUIPMENT AND PROCESSES USED IN THE MANUFACTURE OF TEXTILE FABRICS*

- Class 363. Apparatus used in operations preliminary to weaving; machines for warping, cop winders. Card preparing machines.
- Class 364. Hand and power looms for weaving plain cloths. Looms for weaving brocaded and embroidered fabrics, box looms.
- Class 365. Knitting machinery for hosiery. Machinery for making lace and tulle. Machinery for making trimmings.

GROUP 74

EQUIPMENT AND PROCESSES USED IN BLEACHING, DYEING, PRINTING AND FINISHING TEXTILES IN THEIR VARIOUS STAGES

- Class 366. Apparatus for singeing, brushing and shearing textile fabrics.
- Class 367. Apparatus for washing in lye, scouring, washing, drying, and moistening various textile materials, whether matted, combed, in thread or in web.
- Class 368. Apparatus for boiling and staining dye stuffs and stuffs for thickening fabrics.
- Class 369. Equipment for engraving in relief, or in incised work patterns, for printing on textiles.
- Class 370. Machines for starching, dyeing or printing. Apparatus for steaming.
- Class 371. Machinery of all kinds for finishing goods, for fulling, and for teaseling; tenterframes, calenders, machines for glazing, watering, embossing, beetling. Machines for measuring, folding, etc.
- Class 372. Appliances used for dyeing silks, for beating, shaking up, pinning out, lustering, etc.

*Textile machinery not in operation as part of a process exhibit will be installed in Machinery Hall.

- Class 373. Sweating boxes for thickening, apparatus for spotting, apparatus for bleaching by electricity.
- Class 374. Equipment and processes for laundry work. Washing and rinsing, bluing, drying, bleaching, ironing and finishing.
- Class 375. Industry of the dyers and scourers; dry cleaning by benzine and by other substances; cleaning by wet process; dyeing, pressing.
- Class 376. Specimens of textile materials bleached or dyed before spinning.
- Class 377. Specimens of threads or yarns of cotton, linen, wool, silk, etc., pure or mixed, bleached, dyed or mottled.
- Class 378. Specimens of textile fabrics bleached, dyed or printed.
- Class 379. Specimens of threads, yarns or fabrics which have been sized.
- Class 380. Specimens of chemical thickening of textile materials before they have been spun or woven.

GROUP 75

EQUIPMENT AND PROCESSES USED IN SEWING AND MAKING WEARING APPAREL

- Class 381. Common implements used in needle work.
- Class 382. Machines for cutting cloth, skins and leathers.
- Class 383. Machines for sewing, stitching, hemming, embroidering, etc.
- Class 384. Machines for making button-holes; for sewing gloves, leather, etc.; for plaiting straw.
- Class 385. Tailors' geese, flatirons and equipment.
- Class 386. Busts and figures for trying on garments.
- Class 387. Machines for plaiting straw for hats and making hats of straw, felt, etc.

GROUP 76

THREADS AND FABRICS OF COTTON

- Class 388. Cotton prepared and spun.
- Class 389. Fabrics of cotton, pure or mixed, plain or figured, unbleached, dyed or printed.
- Class 390. Cotton velvets.
- Class 391. Cotton ribbons.
- Class 392. Counterpanes.

GROUP 77

THREADS AND FABRICS OF FLAX, HEMP, ETC.; CORDAGE

- Class 393. Thread of flax, hemp, jute, ramie and other vegetable fibers.
- Class 394. Plain and figured canvas. Ticking. Damask linen. Cambrics and lawns. Plain and fancy handkerchiefs.
- Class 395. Fabrics of flax, or hemp, mixed with cotton or silk.
- Class 396. Fabrics and vegetable fibers other than cotton, flax, hemp, jute or ramie.
- Class 397. Cordage, cables, rope, twine, etc.

GROUP 78

YARNS AND FABRICS OF ANIMAL FIBERS

- Class 398. Combed animal fibers. Yarn of combed animal fibers.
- Class 399. Carded animal fiber. Rovings unbleached or dyed. Yarn of carded animal fibers.
- Class 400. Cloths of combed or carded animal fibers.
- Class 401. Cloths for ladies' wear, made from animal fiber.
- Class 402. Dress goods of combed or carded animal fibers, mixed with cotton or silk.
- Class 403. Muslin delaine, tweeds, merinos, china-satins, serges, mohairs, etc.
- Class 404. Fabrics of carded animal fibers, not fulled or slightly fulled; flannels, tartans, molletons, etc.
- Class 405. Knitted stuffs in combed or carded animal fibers.
- Class 406. Shawls of animal fibers, pure or mixed. Cashmere shawls.
- Class 407. Ribbons and braids of animal fibers, pure or mixed with cotton, flax, silk or floss silk.
- Class 408. Fabrics of hair, pure or mixed.
- Class 409. Blankets.
- Class 410. Felts of animal fibers for carpets, hats, boots and shoes, etc.

GROUP 79

SILK AND FABRICS OF SILK

- Class 411. Silk raw, thrown, twisted.
- Class 412. Floss silk and silk waste.
- Class 413. Threads of floss silk and silk waste.
- Class 414. Artificial silks.
- Class 415. Fabrics of pure silk, silk floss, or silk waste; fabrics of silk or silk floss mixed with gold, silver, wool, cotton, thread, etc., plain, figured, or brocaded, unbleached, dyed or printed.
- Class 416. Velvets and plushes.
- Class 417. Ribbons of silk, or silk floss, pure or mixed.
- Class 418. Shawls of silk or silk floss, pure or mixed.

GROUP 80

LACES, EMBROIDERY AND TRIMMINGS

- Class 419. Lace made by hand; laces, blonde or guipure, wrought on pillow or with the needle or crochet, made of flax, cotton, silk, wool, gold, silver or other threads.
- Class 420. Laces made by machinery; tulle, plain or embroidered; imitation lace, blonde and guipure, in thread of every kind.
- Class 421. Embroidery made by hand; embroidery by needle or crochet with thread of every kind, on all kinds of grounds (fabric, net, tulle, skin, etc.) including needle work upon canvas as well as embroidery appliqué, or ornamented with gems, pearls, jet, spangles of metal, or other material, feathers, shells, etc.

- Class 422. Embroidery made by machinery, with the foundation preserved, or with the foundation cut or burned away.
- Class 423. Trimmings: galloons, lace or braids, fringes, tassels, all kinds of appliqué and ornamental work, hand-made or woven, for millinery or garments, ecclesiastical vestments, civil or military uniforms; for furniture, saddlery, carriages, etc. Threads and plates of metal, gold or silver, real or imitation, spangles, chenilles, and all other articles used for trimmings.
- Class 424. Church embroidery; church ornaments and linen; altar cloths, banners and other objects for religious ceremonies in fabrics, ornamented with lace, embroideries and trimmings.
- Class 425. Curtains with lace, guipure, or embroidery, upon tulle or fabrics; blinds, screens, portières, lambrequins, and other draperies, ornamented with lace, embroidery and trimmings.

GROUP 81

INDUSTRIES PRODUCING WEARING APPAREL FOR MEN, WOMEN AND CHILDREN

- Class 426. Clothing to measure for men and boys; ordinary costumes, suits for hunting and riding, leather breeches and similar articles, suits for gymnastic uses and games, military and civil uniforms, campaign clothing of special types, robes and costumes for magistrates, members of the bar, professors, ecclesiastics, etc., liveries, various costumes for children.
- Class 427. Clothing, ready made for men and boys.
- Class 428. Clothing to measure for women and girls; dresses, vests, jackets, cloaks (made by ladies' tailors, dress makers, or cloak makers), riding habits, sporting suits.
- Class 429. Clothing ready made for women and girls. Patterns.

GROUP 82

FURS AND SKINS, FUR CLOTHING; LEATHER, BOOTS AND SHOES

- Class 430. Furs and skins, dressed and tanned.
- Class 431. Fur clothing, caps, hats, hoods, gloves, boots, etc.
- Class 432. Fur mats and robes; fur trimmings.
- Class 433. Leather in every variety; tanned, curried, enameled, patent leather, wash leather, etc.
- Class 434. Machines for cutting and preparing parts of boots or shoes; machines for sewing boots or shoes; machines for lasting, pegging, nailing, screwing.
- Class 435. Boots and shoes, for men, women and children; boots, bootees, shoes, slippers, pumps, overshoes, soles, accessories, etc.; gaiters.
- Class 436. Military and naval campaign footwear.
- Class 437. Gloves made of skins.

GROUP 83

VARIOUS INDUSTRIES CONNECTED WITH CLOTHING

- Class 438. Hats; hats of felt, wool, straw, or silk; caps; trimmings for hats.
- Class 439. Artificial flowers for dressing the hair, for dress, and for all other uses. Feathers. Millinery. Hair: coiffures, wigs and switches.
- Class 440. Shirts and underclothing for men, women and children.
- Class 441. Hosiery and gloves of cotton, wool, silk and floss silk, etc., knitted hosiery; cravats and neck-ties.
- Class 442. Corsets.
- Class 443. Elastic goods, suspenders, garters, belts.
- Class 444. Canes, whips, riding whips, sun-shades, parasols, umbrellas.
- Class 445. Buttons: buttons of china, metal, cloth and silk, mother-of-pearl, and other shell, ivory-nut, horn, bone, papier-mache, etc.
- Class 446. Buckles, eyelets, hooks and eyes, pins, needles, etc.
- Class 447. Fans and handscreens.

GROUP 84

SAFETY APPLIANCES

- Class 448. Safety appliances and devices for protection of those engaged in manufacturing work and processes, not exhibited in connection with machines. (See also Classes 472 and 476.)

MACHINERY

DEPARTMENT F

GROUP 85

STEAM GENERATORS AND MOTORS UTILIZING STEAM. ACCESSORY APPLIANCES

- Class 449. Steam engines and steam turbines, portable, semi-portable and stationary; valve gear, governors, lubricating apparatus, and accessories attached.
- Class 450. Boilers, stationary, marine, portable and semi-portable; boiler equipment, including furnaces, grate bars, smoke stacks, mechanical stokers, oil burners, oil and other fuel systems, mechanical flue and tube cleaners; forced and natural draft apparatus and equipment; fuel economizers, superheaters; boiler fittings; coal handlers and conveyors; ash handling systems and apparatus.
NOTE: Agricultural and road-making machinery is not included herewith.
- Class 451. Appliances for handling and purifying feed water: feed pumps and injectors, feed-water regulators, feed tanks; feed-water heaters; chemical and mechanical purifiers, oil extractors, scale removing appliances and compounds; water softening compounds. (See Class 462.)
- Class 452. Valve gear, governors and speed regulators for steam engines or turbines, not attached.
- Class 453. Equipment for transmission and control of steam: steam piping and piping systems, including pipe, valves, fittings, steam hose, traps, separators and exhaust heads.
- Class 454. Condensing apparatus: surface and jet condensers; air pumps, dry vacuum pumps, circulating pumps; cooling towers, cooling systems.
- Class 455. Methods and appliances for testing and recording the performances of engines, turbines, boilers, condensers, their auxiliaries, and other machinery: pyrometers, steam thermometers, calorimeters, steam meters, CO² recorders, flue gas analysis apparatus for steam power plants; counters, gages, indicators, tachometers, and dynamometers.

GROUP 86

INTERNAL COMBUSTION MOTORS

- Class 456. Internal combustion engines, gas turbines, and all motors in which internal combustion of the fuel takes place; apparatus and systems for supplying fuel for internal combustion motors.
NOTE: This group does not include motors attached to mobile devices (such as automobiles), nor does it include agricultural or road making machinery.

GROUP 87

HYDRAULIC MOTORS

- Class 457. Impulse wheels, turbines and other motors driven by water power, and apparatus for their regulation and control.

GROUP 88

MISCELLANEOUS MOTORS

- Class 458. Motors operated by heated air, or other means, not elsewhere classified.

GROUP 89

GENERAL MACHINERY AND ACCESSORIES

- Class 459. Appliances for handling heavy weights; overhead traveling and stationary cranes, operated by hand or power; hoisting engines, jacks, differential pulleys. (Marine and mining equipment not included.)
- Class 460. Conveying machinery: belt, bucket and movable table or roller conveyors; trolley conveyors. (For special apparatus in mining see Classes 750, 756 and 780.)
- Class 461. Power-transmitting appliances: leather, fiber, chain, link and other belting; cable and rope drives; gearing, shafting, couplings, pulleys, clutches, hangers, and pedestals.
- Class 462. Apparatus for lifting and handling water and other liquids: hand, steam and power driven pumps, pulsometers, air lifts, hydraulic rams; water pipe and accessories; water meters. (See also Classes 451, 470, 530, 554, 559 and 751 for pumps for special uses.)
- Class 463. Fire engines, extinguishers and fire fighting apparatus. (See Class 183.)
- Class 464. Air and gas compressors and accessories. (See also Classes 354 and 749.)
- Class 465. Brick and tile making machinery. (Transferred to Class 765.)
- Class 466. Dredging and excavating machinery and appliances. (For railroad machinery see Class 520. For mining machinery see Class 759.)
- Class 467. Refrigerating machinery. (See also Classes 531 and 601.)
- Class 468. Packing, gaskets, heat insulating material, lubricators, lubricants, lubricating systems, metal for bearings.
- Class 469. General machinery not otherwise classified.

GROUP 90

TOOLS FOR SHAPING WOOD AND METALS

- Class 470. Steam forging hammers, hydraulic forging presses; hydraulic accumulators, intensifiers, pumps and accessories; extruding presses; hand and power shears, punches and blank cutters for metals; plate bending and planing machines; drop forging hammers; swaging presses; riveting machines. (See Class 462.)
- Class 471. Apparatus, equipment and compounds used in annealing, hardening, tempering, brazing and soldering metals.
- Class 472. Machine tools, lathes, planers, shapers; drilling, boring, milling,

- slotting and splining machines; bolt, nut and pipe machines; metal saws; forcing presses; polishing and finishing machines for metals; machines for rough grinding. All machine tool attachments; safety devices when attached to machines; portable power tools; tool grinding machines; machine shop accessories.
- Class 473. Machinery for grinding accurate surfaces; screw cutting machines; presses and spinning lathes for shaping sheet metals.
- Class 474. Hand tools for machinists: measuring tools; bench tools; etc.
- Class 475. Machines and tools for boiler shop and sheet metal shop work, not elsewhere classified.
- Class 476. Wood working machinery: power saws, wood lathes, planers and jointers, and other wood working power tools other than saw-mill equipment; equipment for bending or pressing wood; box and basket machinery. Attachments for wood-working machinery. Safety devices for wood working machinery when shown attached to machines. (See Class 448.)
- Class 477. Special machinery for various purposes, not otherwise classified.

ELECTRICAL GROUPS

GROUP 91

COMMUTATING APPARATUS

- Class 478. Direct-current commutating generators, all types.
- Class 479. Synchronous commutating machines, comprising synchronous converters, motor converters and double current generators.
- Class 480. Direct and alternating current commutating type motors.
- Class 481. Direct and alternating current commutating type railway motors.

GROUP 92

SYNCHRONOUS APPARATUS

(All Alternating Current)

- Class 482. Synchronous generators, all types.
- Class 483. Synchronous motors.
- Class 484. Synchronous condensers.
- Class 485. Synchronous frequency changers.
- Class 486. Synchronous rotary phase converters.

GROUP 93

STATIONARY INDUCTION APPARATUS

- Class 487. Transformers (including induction coils) and autotransformers, all types.
- Class 488. Potential regulators and reactances, all types.
- Class 489. Induction starters.

ROTARY INDUCTION APPARATUS

- Class 490. Induction generators, all types.
- Class 491. Induction motors.
- Class 492. Induction condensers.
- Class 493. Induction frequency changers.
- Class 494. Induction rotary phase converters.

GROUP 95**UNIPOLAR (ACYCLIC) APPARATUS**

- Class 495. Unipolar (Acyclic) apparatus.

GROUP 96**RECTIFYING APPARATUS**

- Class 496. Rotating commutators.
- Class 497. Electric valves (including mercury rectifiers).
- Class 498. Vibrating commutators.

GROUP 97**LUMINOUS APPARATUS (Sources of Light)**

- Class 499. Arc lamps, all types.
- Class 500. Incandescent lamps, all types.
- Class 501. Vapor lamps, all types.
- Class 502. Vacuum lamps, all types.

GROUP 98**MEASURING, INDICATING AND RECORDING APPARATUS**

(Not including instruments for pure science and research work.)

- Class 503. Instruments for switchboard use.
- Class 504. Instruments for mounting apart from switchboard.
- Class 505. Portable instruments.
- Class 506. Laboratory instruments.

GROUP 99

**APPARATUS FOR PROTECTION OF ELECTRIC APPARATUS AND FOR
CONTROL AND DISTRIBUTION OF ELECTRIC ENERGY, OTHER
THAN RAILWAY MATERIAL**

- Class 507. Complete switchboards.
- Class 508. Lightning arrestors and accessories.
- Class 509. Devices for opening and closing circuits and controlling flow of current therein.

NOTE: In class 509 will be placed such devices as are used in stations and on main circuits.

Class 510. Devices and material used in distribution of current and control of distribution circuits other than in stations and on main circuits; including fuses and fuse holders, conduits, cables, wires, insulators, junction boxes, cabinets, cut-outs, sockets, fixtures, electric sign mechanism, and other subsidiary apparatus not otherwise classified. (See Class 308.)

Class 510½. Electrical workers' tools and appliances.

GROUP 100

ELECTRO-CHEMICAL APPARATUS

Class 511. Storage batteries.

Class 512. Primary batteries.

TRANSPORTATION

DEPARTMENT G

GROUP 101

CARRIAGES AND WHEELWRIGHTS' WORK, AUTOMOBILES AND CYCLES

- Class 513. Pleasure carriages and sleighs, sedan chairs.
- Class 514. Public carriages; ambulances; hearses; carriages for invalids and infants.
- Class 515. Carts and wagons for all purposes; trucks and drays, farm wagons and carts.
- Class 516. Vehicles driven by mechanical motors; motoreycles; automobiles.
- Class 517. Bicycles. Velocipedes.
- Class 518. Detached parts, material and inventions pertaining to carriage building, wheelwrights' work, automobiles or cycles.

GROUP 102

SADDLERY AND HARNESS

- Class 519. Equipment for horses and other animals, attached to carriages, mounted, or in the stable. Harness for pleasure carriages, saddles, bridles; harness for public service or for draught. Parts of harness, materials and inventions pertaining to saddlery and harness making. Military equipment.

GROUP 103

RAILWAYS

- Class 520. Way and structures of railways. Means and methods of construction; grading; ballast, ties, rails and other track materials; grades and change of alignment; bank protection; removal of and protection from snow, ice and sand; tunnels; bridges; trestles; culverts; crossings; fences, cattle guards and signs; signals and interlocking plants; telegraph and telephone plants as applied to railways; buildings, fixtures and grounds; docks and wharves; roadway tools and supplies; steam shovels, wrecking derricks and other work equipment. (See also Class 466.)
- Class 521. Railway equipment. Steam and electric locomotives; passenger-train cars; freight-train cars; electric equipment of cars; building and repair shop equipment. Locomotive cranes.
- Class 522. Railway traffic. Handling of passengers, ticket offices, tickets, baggage handling; industrial, immigration and colonization bureaus. Handling of freight, tariffs, way-bills, means of weigh-

ing; fast freight traffic methods. Literature, lectures, photographic work, advertising, and other methods of promoting traffic.

- Class 523. Railway transportation. Time tables; methods of despatching trains; operation of depots, stations and freight houses; weighing and car-service associations; operation of stock yards, grain elevators, coal and ore docks; operation of yards and engine houses, fuel and water supply; lubricants; operation of trains, including trainmen's signals; cleaning, heating, lighting, ventilating, icing and watering, refrigeration and pre-cooling of cars; drawbridge operation; operation of floating equipment; express and special service; loss of and damage to freight, baggage, property, or stock on right of way; methods for preventing injuries to persons and insuring safety. Apparatus and methods of testing the power and efficiency of locomotives and other railway equipment.
- Class 524. Street railways. Urban and interurban railways for freight or passenger traffic; elevated and subway railways; rack, cable, mono-rail and aerial railways; equipment for these, including track and equipment, motive power, rolling stock, and equipment and methods employed in their operation.
- Class 525. Special methods of transportation, similar to railways. Transportation of ships over railways. Trackless trolley lines. Moving platforms. Scenic and gravity railways for amusement parks.
- Class 526. General. Bibliography, statistics, history, special maps and drawings, and various publications relative to railways. Joint track, detour, and other agreements. Organization, law, insurance, hospitals, club houses, libraries, railroad Y. M. C. A., relief department, pensions, with reference to railways.

GROUP 104

MATERIAL AND EQUIPMENT USED IN THE MERCANTILE MARINE

- Class 527. Raw material and material specially used in the construction and fitting out of ships and boats.
- Class 528. Special tools and implements used in ship-building yards.
- Class 529. Drawings and models of all kinds of vessels or boats for navigating seas and rivers. Illustrations showing the arrangement of such vessels or boats. Drawings and models of tugs and tow boats. Launches and small craft propelled by machinery, by wind, or by oars.
- Class 530. Motive power for vessels and boats (drawings, models and specimens.) Boilers, water heaters, filters for feed water; engines, condensers, propellers, machinery auxiliary to main engines, pumps, governors, indicators of speed and direction, engine counters, and other machinery specifically for the propulsion of vessels. Arrangement for the prevention of fires in holds, storerooms and passages. (See Class 462.)

- Class 531. Marine equipment: winches, tackle blocks, chains, anchors, hawsers, cables, etc. Steering apparatus, order transmitters, machinery for working sails, ship's lights and signals, fresh water evaporators and condensers, apparatus for lighting, heating, supplying air and ventilation. Special apparatus for the generation and use of electricity, refrigerating apparatus, special instruments for determining position and time, flags, furniture, etc. Equipment for loading and unloading merchandise. (See also Class 467.)
- Class 532. Light houses and equipment; buoys, beacons, ranges and other aids to navigation. Application of electric lighting to navigation.
- Class 533. Pleasure craft; yachts, steam, sail or power boats, row boats, outriggers, skiffs, etc., and their accessories (drawings, models and specimens.)
- Class 534. Submarine navigation.
- Class 535. Equipment for saving of lives and vessels at sea, boats, line carriers, lines, traversers, safety belts and jackets, etc. Humane societies. Spreading of oil upon the sea. Equipment for raising wreckage, and for submarine operations for saving sunken material.
- Class 536. Swimming: apparatus and equipment for swimmers or swimming instruction.
- Class 537. Statistics, special charts and publications relative to navigation for commerce or for pleasure.

GROUP 105

- Class 538. Models, or copies thereof, of early English, Spanish and French vessels; pictures, documents and original items illustrating their voyages.

GROUP 106

MATERIAL AND EQUIPMENT OF NAVAL SERVICES; NAVAL AND MILITARY ORDNANCE

- Class 539. Models, designs, drawings, descriptions, specifications, photographs, paintings, of warships and public vessels of special character.
- Class 540. Material used in the construction and fitting out of ships-of-war and public craft; deck and engine-room outfits; signal gear; naval furniture; electrical equipment installed with reference to battle conditions; safety appliances.
- Class 541. Motive power for government vessels.
- Class 542. Marine and military arms and armaments, ordnance, and their equipments; telescopic sights, range finders, shop plotters, etc.; torpedoes, fixed, dirigible, and automobile; naval signals.

AERIAL NAVIGATION

GROUP 107

DIRIGIBLES

- Class 543. Construction: fabrics, cars, dirigibles, war cruisers and touring cruisers, anchors, grapnels, valves, netting, screw-propellers, etc.

GROUP 108

SPHERICAL BALLOONS

- Class 544. Construction: fabrics (cotton or silk, rubberized); cars; netting, cordage, balloons for the study of the atmosphere and for making scientific observations of air currents, clouds, temperature at great heights, optical phenomena, etc.
- Class 545. Statoscopes, thermometers, anemometers, tachometers, recording barometers.

GROUP 109

MILITARY BALLOONING

- Class 546. Military balloons, captive and free, and their accessories; winding drums; transport wagons; apparatus for inflation; scientific instruments, etc.

GROUP 110

AEROPLANES

- Class 547. Monoplanes; biplanes; triplanes; military aeroplanes; frames; parachutes. Screw propellers, aeroplane carriages, speedometers, steering wheels, reservoirs, cables, compasses, buffers, stabilizers, rigging screws, clothing for aviators; toys, kites, etc.
- Class 548. Hydro-aeroplanes.

GROUP 111

GASES

- Class 549. Generation and preservation of hydrogen and other light gases for balloon use.

GROUP 112

MOTORS

- Class 550. Motors for dirigibles and aeroplanes; carbureters; magnetos, etc.

GROUP 113

LITERATURE

- Class 551. Drawings, maps of journeys; diagrams; photographs, etc.

AGRICULTURE

DEPARTMENT H

GROUP 114

FARM EQUIPMENT AND METHODS OF IMPROVING LANDS

- Class 552. Specimens of various systems of farming.
- Class 553. Plans and models of farm buildings; general arrangement of stables, sheep-folds, barns, pig-sties, poultry-houses, breeding-grounds; special arrangements for breeding and fattening cattle; granaries and silos; furniture for stables, barns, kennels, etc.
- Class 554. Material and appliances used in agricultural engineering; reclaiming of marshes; drainage; irrigation. (See Class 462.)

GROUP 115

AGRICULTURAL IMPLEMENTS AND FARM MACHINERY

- Class 555. Implements, machines and appliances for agricultural preparation: machetas, axes, mattocks, grubbing hoes, spades, shovels, hand plows, etc.; walking plows, sulky plows, gang plows, etc.; rakes, rollers, harrows, clod crushers, etc.; stalk cutters, stalk rakes; stump pullers; manure spreaders.
- Class 556. Implements, machines and appliances for seeding; corn planters, seed drills, cotton planters, grain drills, broadcast seeders, etc.
- Class 557. Implements, machines and appliances for cultivation: hoes, cultivators, riding cultivators, cultivators propelled by steam or electricity.
- Class 558. Implements, machines and appliances for harvesting: sickles, scythes, grain cradles, reapers, binder twine, headers, mowers, corn harvesters, potato diggers, combined reapers and threshers propelled by animals, by steam or by electricity; machines and implements for threshing and cleaning, fanning mills, threshers and separators, clover hullers, corn shellers, threshers and separators with stationary or traction engines; wind stackers; fodder shock compressors, bunchers, etc.
- Class 559. Miscellaneous: farm wagons and farm carts; feed cutters, feed grinders, cider mills, machines for ginning and baling cotton, hay baling machinery; horse clipping machines; sheep shearing machines; wind mills, tanks, pumps and other water lifting apparatus for agricultural uses; machines for use on farms for grinding, weighing, etc. (See Class 462.)
- Class 560. Portable agricultural power generating machines; engines, horse powers, agricultural machinery moved by animals, water, air, or electricity. Internal combustion motors for agricultural purposes. Motor driven farm trucks and wagons.
- Class 561. Apparatus for preparing food for animals. Stock foods.

GROUP 116

FERTILIZERS

- Class 562. Preparing and preservation of manures. Commercial fertilizers.
Use of sewage.

GROUP 117

TOBACCO

(Equipment, Processes and Products.)

- Class 563. Tobacco culture; raw material in stalk, leaf and seed.
Class 564. Equipment for manufacture. Construction of tobacco factories.
Class 565. Laboratory appliances.
Class 566. Manufactured products.

GROUP 118

APPLIANCES AND METHODS USED IN AGRICULTURAL INDUSTRIES

- Class 567. Types of agricultural factories connected with farming: dairies; creameries; cheese factories; etc.
Class 568. Oil mills; margarin factories. Grain elevators and appliances.
Class 569. Workshops for the preparation of textile fibers.
Class 570. Equipment for the breeding of birds and for the artificial hatching, raising or fattening of poultry. Poultry foods. Methods of and appliances for packing and transporting.
Class 571. Market gardening. Buildings and appliances for growing, gathering, packing and marketing vegetables. Processes and equipment employed in the forced culture of vegetables and plants, with specimens of products.

GROUP 119

THEORY OF AGRICULTURE AND AGRICULTURAL STATISTICS

- Class 572. Studies relating to soil and water from an agricultural point of view.
Class 573. Agronomic charts, climate charts, various agricultural charts. Registers of land tenures.
Class 574. Rural population. Division of cultivated territory. Yield and returns. Census of farm animals.
Class 575. Progress, especially since 1905. History of agriculture in its successive changes. History of fluctuations in prices of land, rents, labor, live stock, crops and animal products.
Class 576. Institutions for the promotion and advancement of agriculture. Methods and products of experiment stations and laboratories. Societies, agricultural communities and associations. Loans on land. Agricultural insurance.

Class 577. Legislative and administrative measures.

Class 578. Books, papers, statistics, diagrams, periodical publications.

GROUP 120

VEGETABLE FOOD PRODUCTS AND AGRICULTURAL SEEDS

Class 579. Cereals: wheat, rye, barley, maize, millet, oats, rice, buckwheat and other cereals in sheaves or in grain.

Class 580. Legumes and their seeds: beans, peas, lentils, etc.

Class 581. Tubers and roots and their seeds: potatoes, beets, carrots, turnips, radishes, etc.

Class 582. Miscellaneous vegetables and their seeds: cabbages, peppers, artichokes, mushrooms, cresses, etc.

Class 583. Sugar producing plants and their products: beets, cane, sorghum, etc.

Class 584. Miscellaneous plants and their products: coffee, tea, cocoa, etc.

Class 585. Oil producing plants and their products.

Class 586. Forage, growing, green, cured or in silos; fodder for cattle; forage, grass and field seeds.

GROUP 121

APPLIANCES FOR GATHERING WILD CROPS AND PRODUCTS OBTAINED

Class 587. Methods and implements for gathering the products of the soil obtained without culture.

Class 588. Mushrooms; truffles; edible wild fruits.

Class 589. Plants, roots, barks, leaves, fruits obtained without cultivation and used by herbalists, in pharmacy, for dyeing, manufacture of paper, oils, or for other purposes.

Class 590. India rubber; gutta percha. Gums and resins.

GROUP 122

ANIMAL FOOD PRODUCTS

Class 591. Refrigerated fresh meats, poultry, game and fish; edible animal fats and oils, gelatines.

Class 592. Milk and cream, fresh or condensed; sterilized milk.

Class 593. Butter in all forms.

Class 594. Cheese in all forms.

Class 595. Eggs; albuminoid foods and preparations.

Class 596. Dairy fittings and appliances, churns, butter workers, cans, pails, cheese presses, vats, separators, testers, pasteurizers, etc., including all fittings and appliances for the preparation, preservation, transportation, distribution and delivery of milk for the supply of cities and towns.

GROUP 123

EQUIPMENT AND METHODS EMPLOYED IN THE PREPARATION OF FOODS AND BEVERAGES

- Class 597. Flour mills. Factories for the production of glucose and starch.
- Class 598. Manufacture of food pastes.
- Class 599. Bakeries: kneading machines, mechanical ovens; manufacture of ship biscuit.
- Class 600. Pastry works.
- Class 601. Methods and appliances for the utilization of refrigeration in food preservation. Refrigerators and household refrigerating machines. (See Class 467.)
- Class 602. Equipment and methods used for preserving fresh meats, game, fish, etc.
- Class 603. Factories for canning or curing meat, fish, vegetables and fruit.
- Class 604. Sugar manufactories and refineries.
- Class 605. Manufacture of chocolate and confectioneries.
- Class 606. Preparation of ices and sherbets.
- Class 607. Decortication and roasting of coffee, peanuts, etc.
- Class 608. Vinegar or pickling works.
- Class 609. Distilleries; distillers' machinery and supplies.
- Class 610. Wineries; methods and equipment employed in wine making; wine ferments; wine blending; wine preservatives.
- Class 611. Breweries; brewers' machinery and supplies, etc.
- Class 612. Manufacture of aerated waters; bottling works and machinery.
- Class 613. Various industries for the preparation of foods.
- Class 614. Olive oil presses and clarifying apparatus.

GROUP 124

FARINACEOUS PRODUCTS AND THEIR DERIVATIVES

- Class 615. Flour from cereals; grain from which the hulls have been removed, groats, potato starch, rice flour, flour from lentils or beans, gluten; prepared cereals.
- Class 616. Tapioca, sago, arrowroot, various starches, malt. Mixed farinaceous products.
- Class 617. Italian pastes: semolina, vermicelli, macaroni, noodles. Home-made pastes.
- Class 618. Infants' and invalids' foods.

GROUP 125

BREAD AND PASTRY

- Class 619. Breads, with or without yeast, fancy breads and breads in moulds, compressed breads for travelers, military campaigns, etc. Ship biscuits. Yeasts. Baking powders.
- Class 620. Pastry of various kinds peculiar to each country. Ginger bread and dry cakes for keeping.

GROUP 126

PRESERVED MEAT, FISH AND VEGETABLES

- Class 621. Meat preserved by any process. Salted meats, canned meats. Meat and soup tablets. Meat extracts, soups. Various pork products.
- Class 622. Fish preserved by any process. Salt fish, fish in barrels, cod, herring, etc. Fish preserved in oil; tunny, sardines, anchovies. Fish products; oil, roes, isinglass, spermaceti, etc.
- Class 623. Canned lobster, canned oysters, canned shrimp, canned turtle, canned terrapin.
- Class 624. Vegetables preserved by various processes.
- Class 625. Army and navy commissary stores and equipment.

GROUP 127

SUGAR AND CONFECTIONERY, CONDIMENTS AND RELISHES; NUT AND FRUIT FOODS.

- Class 626. Sugar. Glucose. Syrups.
- Class 627. Confectionery. Chocolate. Glacé fruits.
- Class 628. Foods made from nuts or fruits.
- Class 629. Coffee, tea, substitutes for coffee; mate, chicory and sweet acorns.
- Class 630. Vinegar.
- Class 631. Table salt.
- Class 632. Spices and their derivatives: pepper, cinnamon, allspice, flavouring extracts.
- Class 633. Mixed condiments and relishes: pickles, mustard, curries, sauces.

GROUP 128

WATERS AND UNFERMENTED FRUIT JUICES

- Class 634. Artificially aerated, carbonated or mineral waters, ginger ale, and other non-alcoholic beverages. Soda fountains, carbonating machinery, apparatus and fixtures; filters and methods of purifying water for home use.
- Class 635. Cider and other unfermented fruit juices.

GROUP 129

WINES AND BRANDIES

- Class 636. Dry wines, red and white.
- Class 637. Sweet wines: sherry, madeira, port, angelica, etc.
- Class 638. Sparkling wines.
- Class 639. Brandies.
- Class 640. Grape juice, fermented.

**SYRUPS AND LIQUORS, DISTILLED SPIRITS AND COMMERCIAL
ALCOHOL**

- Class 641. Syrups and sweet liqueurs: anisette, curacao, ratafia, benedictine, chartreuse, etc.
- Class 642. Aperients having alcohol or wine as a base: absinthe, bitters; vermouth, myrrh, etc.
- Class 643. Commercial alcohols: alcohol made from beets, molasses, grains, potatoes, etc.
- Class 644. Various distilled spirits, whiskey, gin, rum, vodka, kirschwasser, saké, etc.

GROUP 131

FERMENTED BEVERAGES

- Class 645. Cider and perry. Ale, beer, porter and other malt liquors. Pulke. Koumiss and other fermented drinks low in alcohol.

GROUP 132

INEDIBLE AGRICULTURAL PRODUCTS

- Class 646. Textile plants: cotton; flax and hemp in the straw, scutched or unscutched; ramie, phormium, tenax, vegetable fibers of all kinds.
- Class 647. Oil producing plants, in stalk or in seed.
- Class 648. Non-edible vegetable fats and oils.
- Class 649. Plants containing tannin, weeds and noxious plants.
- Class 650. Plants containing dyes, medicinal plants.
- Class 651. Hops, teasels, broomcorn, etc.
- Class 652. Wool, raw, washed or unwashed.
- Class 653. Packing house by-products.
- Class 654. Feathers, down, hair and bristles, etc.

GROUP 133

**USEFUL INSECTS AND THEIR PRODUCTS, INJURIOUS INSECTS AND
PLANT DISEASES**

- Class 655. Systematic collections of useful and injurious insects.
- Class 656. Systematic collections of vegetable parasites from plants and animals.
- Class 657. Bees. Silkworms and other bombycids. Cochineal insects.
- Class 658. Appliances for rearing and keeping bees and silk worms. Bee and silk worm products; honey, wax, cocoons.
- Class 659. Appliances and processes for destroying plant diseases and injurious insects.

FORESTRY

- Class 660. Forest geography: maps, statistics and general literature. Geographical distribution of forests, of forest types and tree species. Botanical collections: seeds, bark, foliage, flowers, fruit, bark and wood sections.
- Class 661. Planting: equipment and processes for tree collection; nursery practice, field planting and field sowing.
- Class 662. Management and utilization; equipment and processes for protection from fire, insects and disease; organization of protective forces, ranger stations, trail and telephone systems. Logging methods and equipment: transportation of logs; systems of cutting.
- Class 663. Indirect uses of forests: watershed protection; effect on climate and public health; prevention of erosion and shifting sand; use for windbreaks, for recreation purposes and as refuge for game.

GROUP 135

FOREST PRODUCTS

- Class 664. Lumber: equipment and processes used in cutting logs into lumber; drying, dressing and grading of lumber. Lumber grading rules.
- Class 665. Saw-mill and planing-mill products from re-manufacture of lumber: furniture woods, wagon stock, cooperage, boxes, pickets, shingles, doors, etc. Veneering and veneer-cutting machinery.
- Class 666. Forest by-products: tan bark and extract, naval stores, oils and distillates, charecoal, cork, dye woods, medicinal and textile barks, kiln dried wood, wood fuels, wood wool.

LIVE STOCK

DEPARTMENT I

GROUP 136

HORSES AND MULES

- Class 667. Draft horses.
- Class 668. Coach horses.
- Class 669. Carriage horses.
- Class 670. Trotting horses.
- Class 671. Thoroughbred horses.
- Class 672. Saddle horses.
- Class 673. Hunters.
- Class 674. Ponies.
- Class 675. Jacks and jennets.
- Class 676. Mules.
- Class 677. Methods of raising, breeding and working. Literature, statistics and history of the industry.

GROUP 137

CATTLE

- Class 678. Beef cattle.
- Class 679. Dairy cattle.
- Class 680. Methods of raising, feeding, milking, fattening and breeding; statistics; literature and history of the industry.

GROUP 138

SHEEP

- Class 681. Fine woolled sheep.
- Class 682. Combing woolled sheep.
- Class 683. Middle woolled sheep.
- Class 684. Mutton sheep; sheep of breeds not otherwise provided for.
- Class 685. Methods of raising, feeding, fattening, breeding and shearing; statistics; literature and history of the industry.

GROUP 139

GOATS, ETC.

- Class 686. Goats. Other unclassified domesticated animals.
- Class 687. Methods of raising, feeding, breeding and fattening; statistics; literature and history of the industry.

GROUP 140

SWINE

- Class 688. Swine of all breeds.
- Class 689. Methods of raising, feeding, breeding and fattening, statistics; literature and the history of the industry.

GROUP 141

DOGS

- Class 690. Dogs of all breeds; hunting, coursing, coach, watch, pet, etc.
- Class 691. Breeding kennels, bench shows; registers, standards and literature; methods of breeding and raising.

GROUP 142

CATS, PET STOCK, ETC.

- Class 692. All breeds of the domestic cat.
- Class 693. Cavies and their uses.
- Class 694. Rabbits and methods of raising; their use as food; their destruction as pests.

GROUP 143

POULTRY AND BIRDS

- Class 695. Poultry of all breeds including turkeys and all domesticated birds not otherwise specified.
- Class 696. Ducks, geese, swans and other water fowl.
- Class 697. Pigeons; homing pigeons; pigeon lofts.
- Class 698. Guinea fowl, pea fowl, ostriches, pheasants.
- Class 699. Poultry and bird houses, and their fittings; poultry shows; standards of perfection; poultry foods; literature; prices; statistics, methods of breeding and raising.

HORTICULTURE

DEPARTMENT K

GROUP 144

APPLIANCES AND METHODS OF POMOLOGY, FLORICULTURE AND ARBORICULTURE

- Class 700. Horticultural tools; methods and appliances for gathering, packing and transporting produce; pruning and grafting knives, ladders; tree diggers; watering apparatus; spraying apparatus and insecticides.
- Class 701. Frost-fighting principles, methods and devices; apparatus for preventing injury by frost; methods of de-frosting or thawing. Orchard heaters; heaters and vaporizers; heaters and covers.
- Class 702. Apparatus and objects for ornamenting gardens; vases, pots, chairs, seats, fountains, labels, etc.
- Class 703. Glass houses and their accessories; heating apparatus, mattings, etc.
- Class 704. Aquariums for plants. Ferneries, etc., for use in dwellings.
- Class 705. Garden architecture and landscape gardening; plans, drawings, models, books, pictures, etc.

GROUP 145

APPLIANCE AND METHODS OF VITICULTURE

- Class 706. Types of buildings used in connection with vine culture.
- Class 707. Methods of picking, packing and transporting fresh grapes.
- Class 708. Raisin growing; methods of curing, packing, grading, etc.

GROUP 146

POMOLOGY

- Class 709. Pomaceous and stone fruits: apples, pears, quinces, peaches, apricots, plums, nectarines, cherries, grapes, etc.
- Class 710. Citrus fruits: oranges, lemons, limes, shaddocks, pomelos, etc.
- Class 711. Tropical and semi-tropical fruits: pineapples, avocados, bananas, guavas, mangoes, tamarinds, figs, olives, sapodillas, etc.
- Class 712. Small fruits: strawberries, raspberries, blackberries, dewberries, gooseberries, currants, etc.
- Class 713. Fruits matured in frost districts under frost protecting appliances.
- Class 714. Nuts: walnuts, almonds, chestnuts, filberts, pecans, hickorynuts, etc.
- Class 715. Casts and models of fruits in wax, plaster, etc. Photographs, publications and monographs. Labels for canned or preserved fruits.

PRESERVED, DRIED AND PICKLED FRUITS

- Class 716. Fruits, dried or prepared: prunes, figs, raisins, peaches, apricots, dates, etc.
- Class 717. Fruits, canned, in tins or in glass. Fruits preserved without sugar.
- Class 718. Pickled fruits. Brandied fruits. Preserves, jellies and jams.
- Class 719. Processed fruits.
- Class 720. Olives: green, ripe, pickled and dried. Olive oil.
- Class 721. Equipment for and processes of canning fruit. Canning factories.

GROUP 148

FRUIT CULTURE.

- Class 722. Collections of fruit trees and vines. Methods of propagating, packing, shipping, planting, growing, training, pruning, etc.
- Class 723. Plants of small fruits: strawberries, raspberries, blackberries, gooseberries, etc. Methods of propagating, growing, transplanting, training, packing, shipping, etc.
- Class 724. Methods of cross-fertilization of fruits and nuts.
- Class 725. Exhibits of insect pests and diseases of fruit trees, vines and plants, and modern appliances for their eradication. Advantages in the use of predaceous and parasitic insects.

GROUP 149

TREES, SHRUBS, ORNAMENTAL PLANTS AND FLOWERS

- Class 726. Ornamental trees, seedlings or grafted. Methods of propagating, packing, shipping, planting, growing, training, grafting, pruning, etc.
- Class 727. Ornamental shrubs, deciduous and evergreen. Methods of propagating, packing, shipping, planting, growing, training, grafting, pruning, etc.
- Class 728. Flowering plants for the park or garden. Bulbous plants. Herbaceous plants grown in open ground. Botanical specimens.
- Class 729. Plants for the conservatory, ornamental and flowering. Hot-house plants and those grown in houses of moderate temperature.
- Class 730. Specimens of culture used in different countries for use or for ornament.
- Class 731. Forced culture of fruits; specimens and processes.
- Class 732. Insect pests, fungus diseases and parasitic growths affecting ornamental trees and plants; natural and artificial methods of combating them.
- Class 733. Masses and baskets of flowers. Bouquets of natural flowers. Wax or other imitations of plants, leaves or flowers. Florists' supplies.

GROUP 150

SEEDS, BULBS, CUTTINGS AND PLANTS FOR PROPAGATING

- Class 734. Collections of seeds of flowers, plants and trees.
- Class 735. Collections of bulbs for planting.
- Class 736. Collections of cuttings or young plants for grafting. Nursery stock.
Methods of packing and shipping.
- Class 737. Flowers and plants grown for perfumes, extracts, and medicinal uses.

GROUP 151

THEORY OF HORTICULTURE AND HORTICULTURAL STATISTICS

- Class 738. Charts or diagrams showing the comparative area occupied by fruit industries in states and countries. Charts or diagrams illustrating progress of organization among fruit growers for promotion of their industry by improved packing and marketing methods.
- Class 739. Charts showing moisture requirements of different fruits supplied by rainfall or irrigation, or by both. Charts or diagrams showing the period of ripening of different fruits in any state and country. Charts and names and time of market suitability of varieties of each fruit commercially grown in any state or country. Charts showing rainfall, sunshine and wind movements as affecting the character and yield of fruit.
- Class 740. Graphic representations of the history and work of state and national horticultural societies, including publications thereof.
- Class 741. Charts showing districts where frost protection will benefit growers.
- Class 742. Treatises on international, national and interstate fruit and fruit tree quarantine. Charts showing quarantine passports, tags, certificates, etc.

MINES AND METALLURGY

DEPARTMENT L

GROUP 152

WORKING OF MINES, ORE BEDS AND STONE QUARRIES

(Equipment and Processes.)

- Class 743. Equipment and methods of geological surveys, mining bureaus, societies and other institutions for the promotion of mining. Instruments and equipment for surface and underground surveys and examinations in connection with mining.
- Class 744. Equipment and methods of prospecting for mineral veins and deposits, for building stones, coal, petroleum, natural gas, artesian waters, etc.
- Class 745. Equipment and methods for sampling, assaying, analyzing or testing ores, metals and other minerals and mineral products.
- Class 746. Equipment and methods for drilling, cutting or otherwise breaking down rock, ore, or other mineral in quarries, open cuts or mines; sinking shafts, opening galleries, drifts or tunnels.
- Class 747. Explosives and methods for storing, handling, thawing, placing and firing the same, in mines, quarries and deep wells; different classes of explosives, and methods and equipment for testing the same.
- Class 748. Equipment for, and methods of mining coal and other minerals, and of timbering or otherwise securing mine shafts, drifts, rooms, stopes, etc., or tunnels, and of preventing surface subsidence over mines.
- Class 749. Electric, compressed air, or other motors, for use in opening and operating mines and quarries, and for operating equipment for handling ores and other minerals. (See Classes 459 and 464.)
- Class 750. Equipment and methods for the underground handling and transportation of ore, coal, etc., including haulage engines and rope, and locomotives using compressed air, electricity, gasoline, alcohol, etc. (See Class 460.)
- Class 751. Machinery and appliances for draining mines and quarries. (See Class 462.)
- Class 752. Equipment for and methods of ventilating mines.
- Class 753. Equipment for and methods of lighting mines: oils, acetylene, electricity; safety lamps, testing and cleaning lamps; lamps and other appliances for testing mine gases.
- Class 754. Equipment and methods for mine safety; safety appliances and methods, including signals, mine telephones, etc.; safety devices; methods of preventing dust explosions and other accidents; equipment and devices for fighting mine fires; mine laws, rules and regulations in behalf of safety in mines and quarries.

- Class 755. Equipment and methods for mine rescue work, apparatus for artificial respiration, and other appliances; equipment and methods of resuscitating persons overcome by electric shock or by mine gases; equipment and methods in first aid to the injured in mines; equipment and methods in mine sanitation.
- Class 756. Equipment and methods for handling and weighing mine products at the mine, and for their above-surface transportation; tipples, screens, picking tables, etc.; railways, tramways, inclined planes, belt conveyors, loose cables, aerial cables, trolleys, etc.; appliances for loading and unloading wagons, boats, cars, etc.
- Class 757. Machinery, appliances and methods for working gases or minerals in liquid form or in solution, such as petroleum, natural gas, salt, sulphur, etc.; appliances and methods for capping and plugging gas and oil wells; pipe lines, storage facilities, etc.
- Class 758. Equipment and methods used in quarrying stone and other materials requiring similar operations.
- Class 759. Equipment and methods used in excavation, in open-pit and placer mining; steam shovels, dredges, and hydraulic mining equipment; special methods of storing and conveying water, etc. (See Classes 199 and 466.)

GROUP 153

MINERALS AND STONES, AND THEIR UTILIZATION

- Class 760. Systematic collections in geology, general mineralogy, crystallography and paleontology. Collections illustrating the structure, modes of occurrence and origin of ore deposits, and other mineral deposits, with maps showing their distribution.
- Class 761. Building materials: ornamental and building stones, rough hewn, sawed or polished; stones for highway construction and other purposes.
- Class 762. Mechanical appliances and processes used in cutting, sawing, shaping and polishing marble, granite, slate, and other building stone.
- Class 763. Equipment and processes for crushing, separating, washing or drying rocks, clays and other minerals.
- Class 764. Building materials: Rocks which produce lime or cement. Processes and appliances used in the preparation of lime, cement and plaster; their products and uses; artificial stone.
- Class 765. Clays, fuller's earth, kaolin, feldspar, silica sand and rock, quartz and other substances used in the manufacture of earthenware and of building materials such as brick, paving brick, paving and roof tiles, pipe, terra cotta, glass, etc.; processes of utilization with specimens of their products; brick and tile making machinery.
- Class 766. Grindstones, whetstones, pumice stones; other natural and artificial mineral abrasives, including carborundum, alundum, etc.; processes of their manufacture and their use.
- Class 767. Refractory rocks, fire clays and sands. Moulding sands.
- Class 768. Mica, asbestos, meerschaum, fluorspar, graphite (plumbago), gypsum and other non-metallic minerals; processes of utilization with their products.
- Class 769. Gems and precious stones; lapidary work; artificial gem materials and their preparation.

- Class 770. Common salt, nitrates, sulphates, borates, and other natural salts; methods of purification with their products.
- Class 771. Mineral waters; artesian water conditions; utilization of water.
- Class 772. Sulphur and pyrite: process of utilization, with their products.
- Class 773. Mineral and vegetable paints; dye stuffs, pigments, varnishes and fillers; processes of preparation and their products; painting and glazing.
- Class 774. Mineral fertilizers; natural and artificial sources of nitrogen; potash and phosphates; processes of preparation, with their products.
- Class 775. Asphalt and asphaltic rocks; mineral bitumen and wax; amber, jet, etc.; processes for obtaining, treating, refining, and utilizing, and their products.
- Class 776. Mineral fuels and luminants; peat, lignite, bituminous coal, anthracite; coal dust and compressed coal; petroleum and its products; mineral gases. Equipment for crushing, separating, and washing coal. Equipment and processes for briquetting or otherwise compressing fuels; for preparing coke and by-products; for storing, refining, and handling petroleum and natural gas products.
- Class 777. Metallic ores of every kind, and products. Native metals.
- Class 778. Artificial mineral products, their preparation and use.

GROUP 154

MINE MODELS, MAPS, PHOTOGRAPHS

- Class 779. Maps, charts, photographs, and models illustrating geologic or topographical features, and their relation to mineral deposits, or the structure or mode of occurrence of mineral deposits. Mine models, working plans of mines; maps, photographs, lantern slides, moving pictures, etc., of mining operations, plants, camps, etc.

GROUP 155

METALLURGY

- Class 780. Equipment, methods and processes used, and products obtained; (a) in the handling of ores, such as hand sorting, conveying, elevating, weighing, sampling, etc.; (b) in the preparation of ores, such as breaking, crushing, pulverizing, grinding, washing, drying, etc.; (c) in the concentration, separation and classification of ores, such as screens and trommels, jigs, sand and slime separators, slime settling and thickening devices, dry vanners, etc.; water clarifiers, flotation processes with the aid of oil, gas, etc.; magnetic and electrostatic concentration, deerepitation, briquetting, sintering, etc. (See also Class 460.)
- Class 781. Equipment, materials, processes, products and by-products concerned in the treatment of the ores of iron for pig iron; equipment for smelting iron ores; blast furnaces and accessories; furnace construction; appliances used in operating furnaces and in handling and utilizing furnace products. Equipment for measuring furnace temperatures. Equipment and methods in the gen-

eration and use of gases, the preparation and use of liquid and solid fuels, generation, drying and heating of blast; handling and use of slags; recovery, use of and injuries from dust, fumes, etc. Varieties of pig iron.

- Class 782. Equipment, methods and products of the manufacture and use of refractory materials for metallurgical purposes (bricks, blocks, crucibles, retorts, etc.)
- Class 783. Equipment, materials, processes and products concerned in the manufacture of Bessemer, open hearth, crucible and electrically-refined steel; ingots, billets, blooms, slabs, steel castings and other semi-finished material; re-heating furnaces, hammers, presses and rolls used in shaping these. Various processes of manufacturing iron or steel directly from the ores, such as electric smelting and refining, etc.
- Class 784. Equipment, materials, processes and products concerned in the manufacture of special and alloy steels, including the preparation of manganese, chromium, nickel, vanadium, tungsten and other metals used therein.
- Class 785. Equipment, materials, processes and products concerned in producing and refining wrought iron.
- Class 786. Equipment, methods and processes in the manufacture of iron and steel in finished commercial forms, such as merchant bar, hoop iron, band iron, bars for wire drawing, iron and steel wire; iron and steel of standard or special sections, armor plates, sheet iron and sheet steel for commercial building, metallurgical and other purposes; rails, axles, tires, wheels, large forgings, gun barrels, projectiles, ordnance equipment, other than naval, and its production.
- Class 787. Equipment, processes and products in the manufacture of welded and seamless metal pipes and tubes, other than cast iron pipes.
- Class 788. Metal plates and screens, flanged, stamped, cut, decorated and perforated, and their production. Production and use in metallurgical operations of wire cloth and screens.
- Class 789. General foundry equipment. Foundry processes and products.
- Class 790. Equipment, materials, and processes used in the metallurgy of copper, and products obtained. Treatment of ores, production of copper and copper alloys, bronze and brass, in ingots, bars, sheets, wire and other forms. Electrolytic and other processes used in refining copper, and in separating the accompanying gold, silver, and other substances.
- Class 791. Equipment, materials and processes used in the metallurgy of gold and silver, including amalgamation, hydrometallurgy, etc., and products obtained. Treatment of the ores: retorting amalgam, refining precipitates and electrolytic slimes; parting of gold and silver; melting, refining, stamping and shipping bullion. Gold and silver in bars and other forms.
- Class 792. Equipment, materials, and processes used in the metallurgy of lead, and products obtained; treatment of ores, including blast roast-

ing, sintering, briquetting, smelting, etc.; refining of lead bullion and the separation of the associated gold and silver. Production of lead in commercial forms, pig, bars, sheets, pipes, shot and test lead; lead alloys; white lead and other lead pigments.

- Class 793. Equipment, materials, and processes used in the metallurgy of zinc, cadmium and mercury, and their alloys, zinc spelter, metallic zinc in bars and sheets, and zinc white; treatment of galvanizer's dross and zinc skimmings.
- Class 794. Equipment, materials, and processes used in the metallurgy of aluminum, sodium, calcium, magnesium, and their alloys, and other metals or alloys produced or refined by electro-metallurgical processes and not otherwise provided for.
- Class 795. Equipment, materials, and processes used in the metallurgy of arsenic, antimony, tin, nickel, platinum and other metals not otherwise provided for, and their alloys, such as German silver and monel metal.
- Class 796. Equipment for and processes of recovering and treating gold and silver and other metal waste in the working of these metals, and dust from refiners of precious metals. Appliances, processes, and products for exact rolling, beating and grinding of gold, silver, aluminum, zinc, lead, tin, and other metals and alloys. Apparatus and processes for working platinum and other rare metals.
- Class 797. Equipment, processes and products of electricity applied to the production and refining of metals and other mineral products not otherwise classified; electroplating; electric and other methods of welding; electrotyping; and other applications of electricity in metallurgy not otherwise provided for.
- Class 798. Apparatus and processes (other than electro-metallurgical) for coating metals with more precious, more malleable or more durable metals; case hardening; malleableizing; galvanizing or sherardizing of metals, leading or nickel plating; tin plates (bright, dull, mottled, ornamental, printed) and tin plating.
- Class 799. Appliances and processes for enameling metallic objects, and products, and other metal coating or protection not otherwise provided for.

GROUP 156

LITERATURE OF MINING AND METALLURGY

- Class 800. Statistics and publications relative to geology, mineralogy, paleontology, topography, quarrying, mining, mine accidents, metallurgy, the manipulation of mineral products and the development of water resources.



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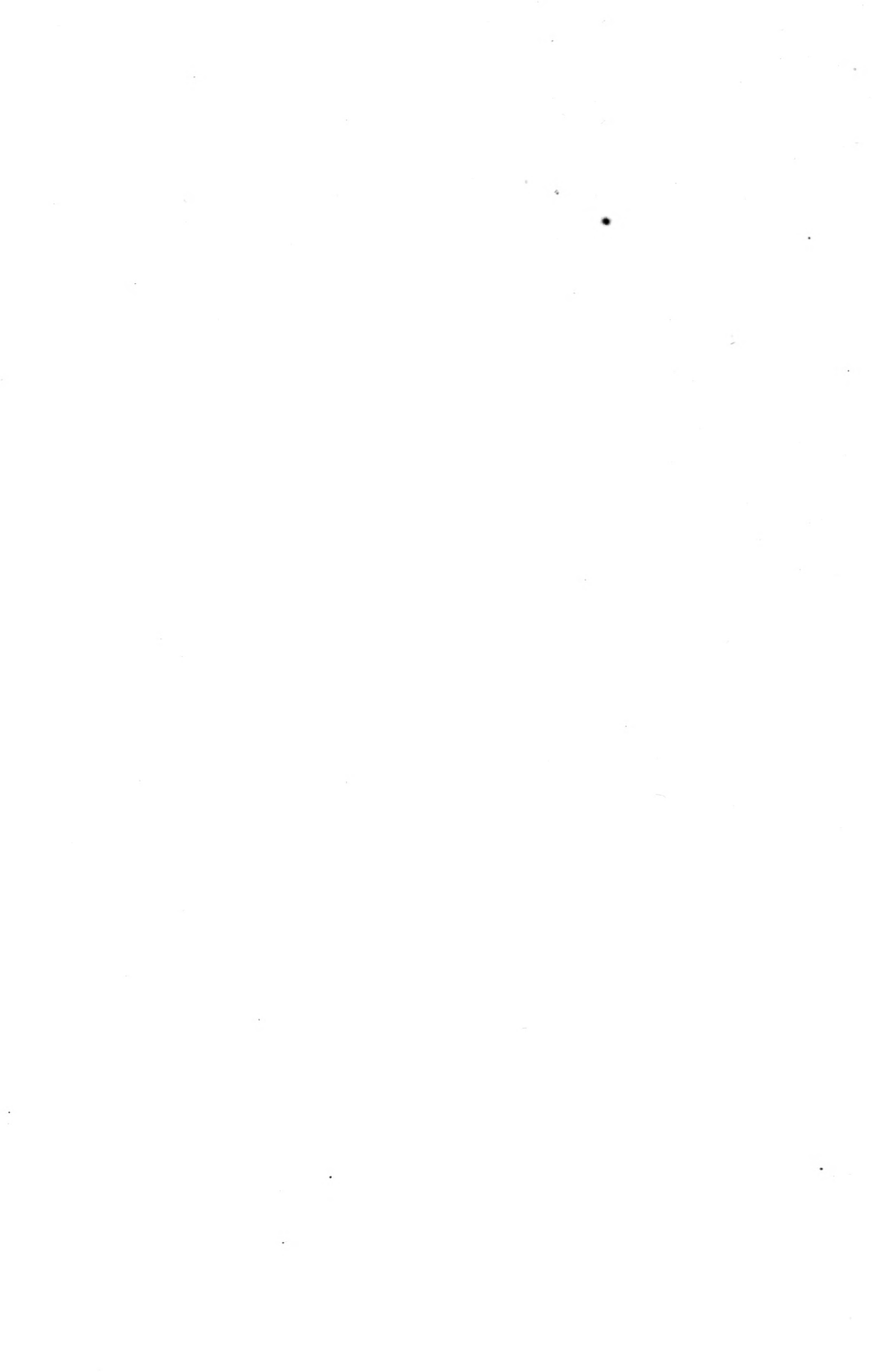
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